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Fishes Taken During Shrimp Trawling Along the South Atlantic Coast of the United States, 1931-35

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Fishes Taken During Shrimp Trawling Along the South Atlantic Coast of the United States, 1931-35

By

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United States Fish and Wildlife Service

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Fishes Taken During Shrimp Trawling Along the South Atlantic Coast of the United States, 1931-35

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ABSTRACT

Fish of numerous families and species are taken with shrimp on the shrimping grounds. Records of the fish taken during a study of the white shrimp by the U.S. Bureau of Fisheries, are provided. These records cover the coast from Cape Romain, S.C., to Cape Kennedy, Fla., and are organized under four basic areas: South Carolina Outside, Georgia Outside, Georgia Inside, and Florida Outside. The entire region is treated also as a unit. Yearly and monthly average numbers of fish taken per hour of trawling and percentages of the catch are provided for all species for the region and for the several basic areas.

Seasonal variation in the numbers of fish on the shrimp fishing grounds is large; numbers are lowest during the late winter and spring, build up rapidly in the summer and early fall, and are highest in the late fall and early winter.

The croaker family (Sciaenidae) was the most abundant and important found on the shrimp fishing grounds. Croakers were captured in greater numbers than all other families of fish combined in every month of the year.

Four families of fish--The Sciaenidae (croakers), Carangidae (jacks), Ariidae (sea catfish), and Bothidae (flounders)--were taken in greatest numbers per hour of trawling and together contributed almost 87 percent of the yearly average catch in the region.

Seven species of fish--Stellifer lanceolatus (star drum), Micropogon undulatus (Atlantic croaker), Leiostomus xanthurus (spot), Menticirrhus spp. (king whiting), Chloroscombrus chrysurus (bumper), Cynoscion regalis (gray seatrout), and Etropus crossotus (fringed flounder)--each contributed 3 percent or more of the yearly average catch for the region, and together represented over 76 percent of the yearly average catch in the region.

INTRODUCTION

The U.S. Bureau of Fisheries, during studies on the white shrimp (Penaeus setiferus) along the south Atlantic coast of the United States in 1931-35, recorded the fish captured incidentally to trawling for shrimp. These records give information on relative and seasonal abundances of the many families and species of fish associated with shrimp on the fishing grounds. These data enable us to make a good estimate of the average catch of fish taken during commercial shrimp fishing.

METHODS

The data were obtained from operations of the U.S. Bureau of Fisheries boat Launch 58, a 40-foot (12.2-m.) shrimp trawler (fig. 1) using standard commercial shrimp trawls, which were 75 feet (22.3 m.) wide and made of 1-3/4-inch (4.4-cm.) stretched mesh netting. Hauls were made at 2 to 3 knots and lasted 1 to 1-1/2 hours. Fish were sorted and counted aboard the boat--when catches were large a subsample was used. Specimens representing species new to the catches, or for which

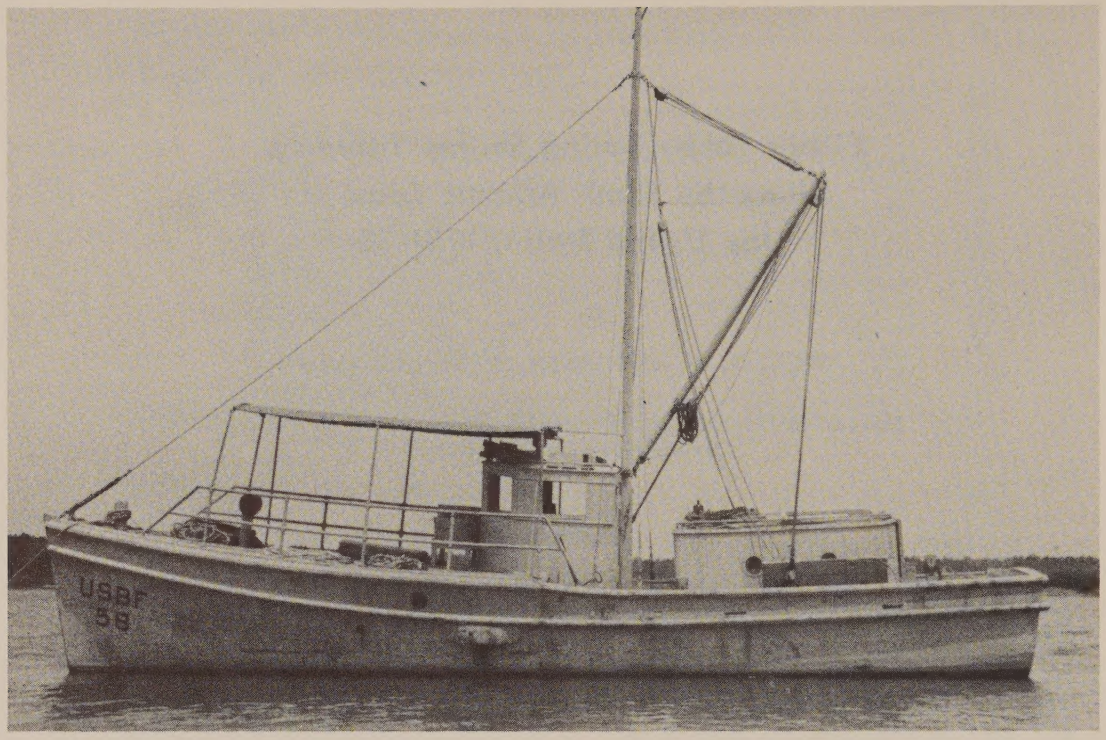

Figure 1.--Launch 58, a 40-foot (12.2-m.) shrimp trawler used in the studies of white shrimp along the south Atlantic coast in 1931-35.

identification was in doubt, were preserved for later identification.

From 1931 through April 1933 the work was confined largely to Georgia, though some trawling was done in outside waters off northern Florida. In Georgia, hauls were made regularly in all sections of the fishery, including salt-water rivers and creeks, sounds, and the outside grounds.

Operations in Georgia were curtailed in May 1933, and work was extended to cover outside waters in South Carolina and central Florida, at a series of stations extending from Cape Romain, S.C., to Cape Kennedy, Fla. Usually two hauls were made in each month during the operations in each locality. The localities (fig. 2) and months fished were as follows, from north to south.

South Carolina:

1. Off Cape Romain--September 1934 through July 1935.
2. Off Stono Inlet--May 1933 through July 1935, except May through August 1934.
3. Off Gaskin Banks or Fripp Inlet--same months as locality 2.

Georgia:

4. Off St. Catherines Island--May 1933 through July 1935, except May through August 1934.
5. Off Brunswick--same months as locality 4.
6. Inside waters near Brunswick--same months as locality 4.

The above three localities are in addition to the concentrated work in Georgia from 1931 through April 1933.

Florida:

7. Off Fernandina--May 1933 through July 1935, except May through August 1934.
8. Off St. Johns River--May 1933 through April 1934, and August 1934.
9. Off St. Augustine--May 1933 through April 1935, except May through July 1934.
10. Off New Smyrna--same months as locality 9.
11. Off Cape Kennedy--same months as locality 9.

The outside shrimping grounds in the work area or region were confined to a narrow

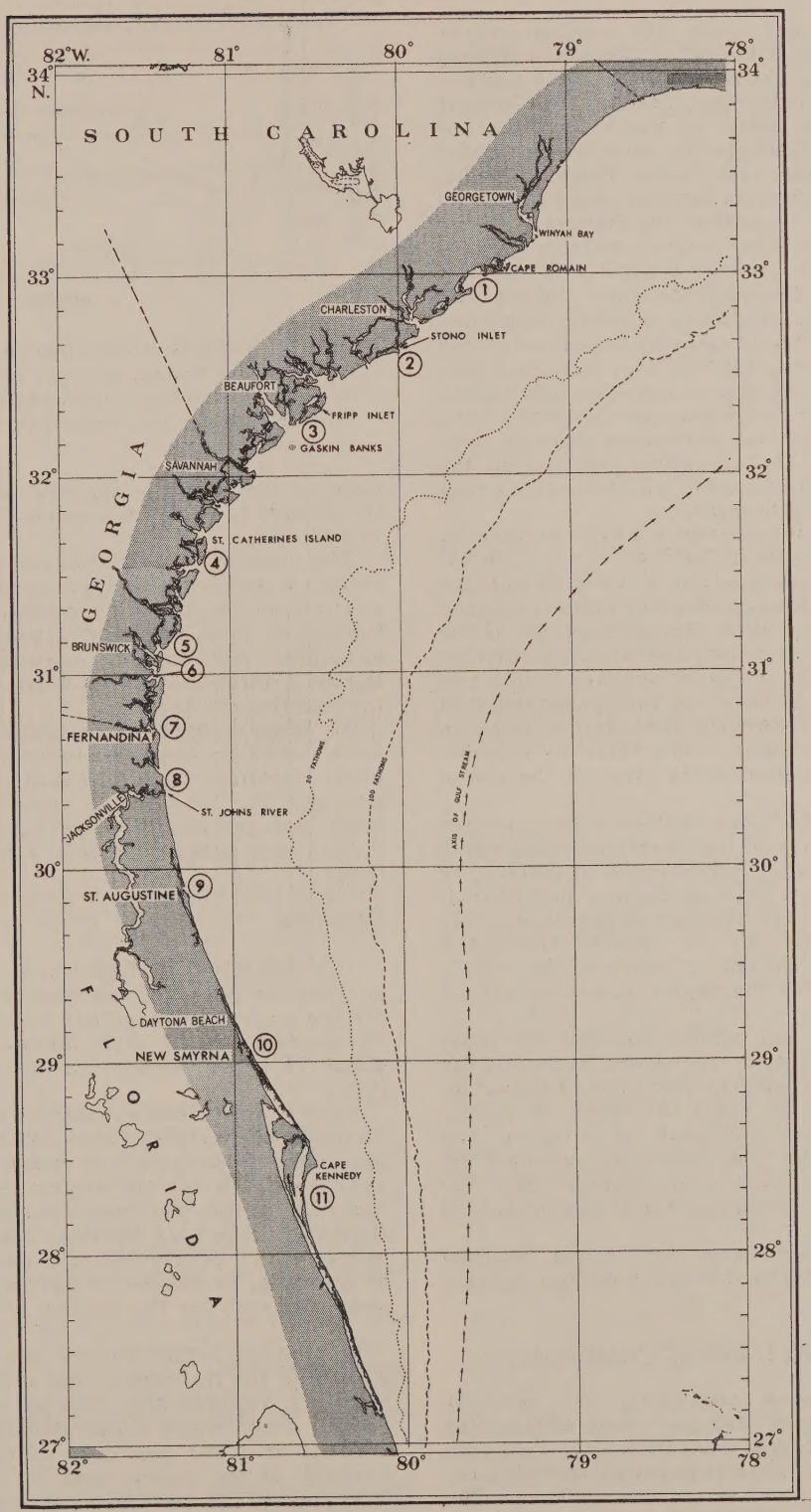

Figure 2.--Coasts of South Carolina, Georgia, and part of Florida, showing general locations of sampling stations.

coastal strip not over 10 nautical miles (18.5 km.) wide, but most of the ocean fishery was between the shoreline and about 6 nautical miles (11.1 km.) offshore. Trawling was largely limited to this strip in South Carolina and Florida, but in Georgia the work was extended to inside grounds--salt-water rivers, creeks, and sounds. Anderson, Lindner, and King (1949) gave a detailed account of the fishery.

The data for the region were organized under four basic areas: South Carolina Outside; Georgia Outside; Georgia Inside; and Florida Outside. In addition, the following combinations were made: Georgia Combined; South Carolina, Georgia, and Florida, Outside Combined; and All Areas Combined--the last representing the entire work area or region as a unit. Fishing localities for each area were as previously listed. Table 1 gives, by month, the number of hours of trawling in the basic areas and combinations thereof.

Monthly data for all years were combined to give average figures. Tables 2 to 8 give for each area and combination of areas, by species and month: the average number of fish captured per hour of trawling, the percentage of the total catch for the month, and the actual number of fish captured. A yearly average number of fish per hour of trawling and percentage of total catch are provided for each species in the right-hand column, and a total, by months, for all species combined is given at the end of each table.

Data for 10 families that each represented 1 percent or more of the yearly average catch for the region are summarized in table 9, by areas, for yearly average number per hour of trawling and yearly average percentage of the total catch. Data for 17 species that each represented 1 percent or more of the yearly average catch for the region are summarized in table 10.

In table 11 are shown for the 10 most important families, by areas and by month, the average number of fish per hour of trawling, and percentage of the total catch. A yearly average number per hour of trawling and percentage of the total catch are provided for each family and each area. Similar data for the 17 most important species are summarized in table 12.

Table 13 provides a list of the species taken, by family, and their common names.

REGION (ALL AREAS COMBINED)

For all species combined, the monthly average number of fish per hour of trawling had a large seasonal variation (fig. 3). From a low of just over 900 fish per hour in February and March, the number rose to 1,000 to 1,200 during April, May, and June; increased rapidly during summer and early fall to a peak in November and December at 2,700 to 2,800

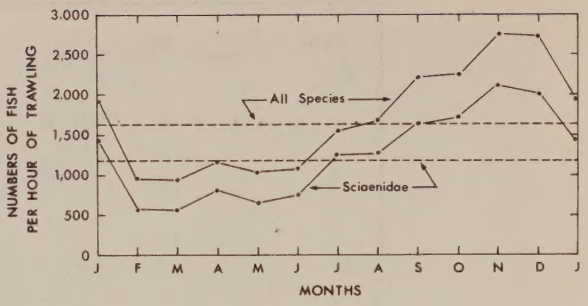

Figure 3.--Numbers of fish taken per hour of trawling during shrimp fishing, all areas combined, all species by months for all years combined (see table 8). Family Sciaenidae shown for comparison. Broken lines are yearly averages.

fish per hour of trawling; and declined abruptly in January toward the seasonal low in February and March.

The croaker family (Sciaenidae) is the most abundant and important group of fish taken with shrimp on the fishing grounds. To emphasize the importance, the monthly average number of sciaenids per hour of trawling is shown in figure 3 (also in figures 4 and 5, which cover the individual areas).

In every month of the year the sciaenids were taken in greater numbers than were all other families of fish combined. The yearly average for all species combined was about 1,600 fish per hour of trawling, of which nearly 1,200 were Sciaenidae--or 3 of every 4 fish taken.

Families

Ten families of fish each represented 1 percent or more of the yearly average catch for the region and together contributed almost 98 percent of all fish taken--ranging from about 97 to 99 percent in the separate areas (table 9).

Four of these families (Sciaenidae, Carangidae, Ariidae, and Bothidae) each represented 3 percent or more of the yearly average catch for the region and the greatest numbers of fish per hour of trawling. Together, fishes of these four families contributed 1,420 of the 1,633 yearly average number per hour of trawling, or almost 87 percent of the yearly average catch for the region.

Sciaenidae.--The yearly average catch of croakers for the region was 1,191 per hour of trawling, representing 73.0 percent of the total catch. They were most abundant in Florida Outside at 1,962 per hour of trawling and 72 percent of the catch; next in South Carolina Outside, 1,730 per hour of trawling and 83 percent of the catch; then Georgia Inside, 1,096 per hour of trawling and 73 percent of the catch; and least abundant in Georgia

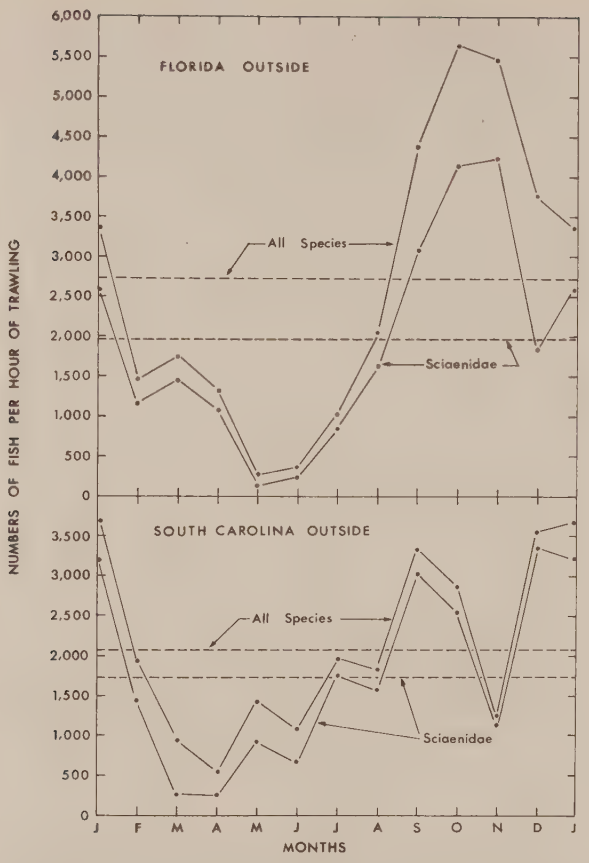

Figure 4.--Numbers of fish taken per hour of trawling during shrimp fishing, South Carolina Outside and Florida Outside, all species by months for all years combined (see tables 2 and 5). Family Sciaenidae shown for comparison. Broken lines are yearly averages.

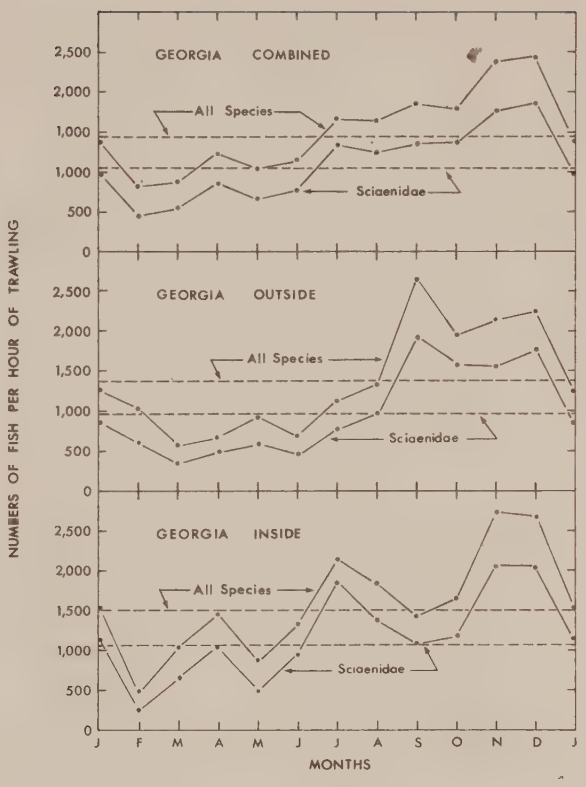

Figure 5.--Numbers of fish taken per hour of trawling during shrimp fishing, Georgia Inside, Georgia Outside, and Georgia Combined, all species by months for all years combined (see tables 3, 4, and 6). Family Sciaenidae shown for comparison. Broken lines are yearly averages.

Outside, 983 per hour of trawling and 71 percent of the catch.

Fewer than 600 sciaenids were taken per hour of trawling in February and March; the number increased slowly during spring and early summer, spurted to almost 1,300 in July and August, continued to climb during early fall, and peaked at 2,000 to 2,100 in November and December; catches declined in January and continued to the low in February and March (fig. 6).

The percentage of sciaenids in the monthly average catches was lowest--60 to 61 percent--during February and March, increased during spring, and reached and maintained a level of 73 to 83 percent from July to January (fig. 7).

Carangidae.--The yearly average catch of jacks for the region was 89 per hour of trawling, representing 5.4 percent of the total catch. Catch per hour of trawling and percentage of the catch in different areas, ranked in descending order of importance were: Florida Outside, 388 per hour and 14 percent of the catch; Georgia Outside, 111 per hour and 8 percent; South Carolina Outside, 20 per hour and about 1 percent; and Georgia Inside, 18 per hour and about 1 percent of the catch.

Fewer than 10 carangids were taken per hour of trawling in March and April; the number increased rapidly and steadily through the late spring, summer, and fall, to peak at 287 in December, and then declined to about 126 in January and continued to the low in March and April (fig. 6).

Carangids contributed about 1 percent or less of the monthly average catches in March and April, increased during late spring, reached and maintained a level of about 6 to 8 percent during late summer and fall, exceeded 10 percent in December, peaked at over 22 percent in January, declined abruptly in February, and continued to the low in March and April (fig. 7).

Ariidae.--The yearly average catch of sea catfishes for the region was 81 per hour of trawling, representing 4.9 percent of the total catch. They were most abundant in Florida

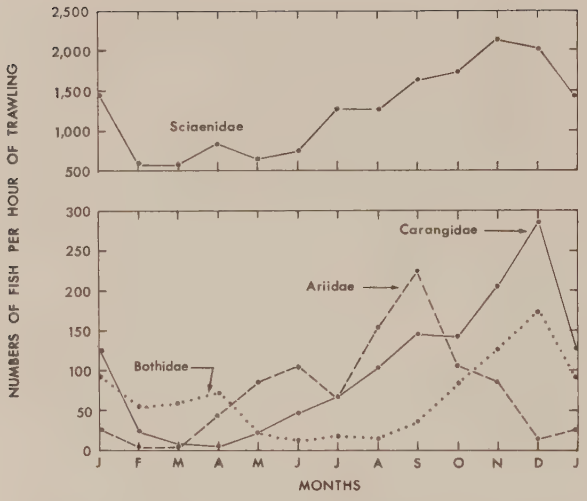

Figure 6.--Numbers of fish of the families Sciaenidae, Carangidae, Ariidae, and Bothidae taken per hour of trawling in different months during shrimp fishing; all areas and years combined.

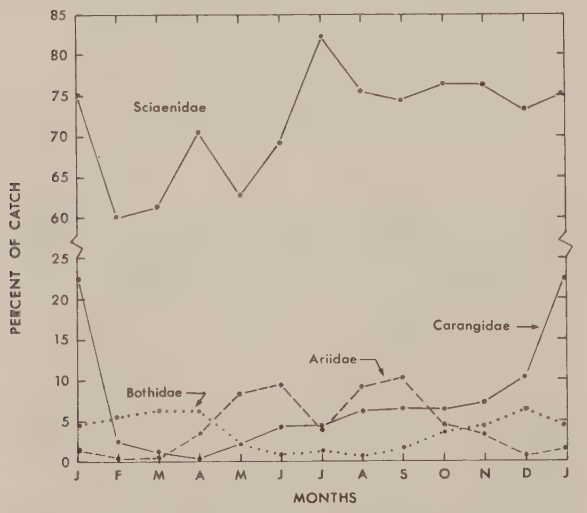

Figure 7.--Percentage of the catch of fish taken during shrimp fishing contributed by the families Sciaenidae, Carangidae, Ariidae, and Bothidae, by month for all areas and years combined.

Outside at 153 per hour of trawling and 5.7 percent of the catch; next in Georgia Inside, 95 per hour of trawling and 6.3 percent of the catch; then Georgia Outside, 47 per hour of trawling and 3.4 percent of the catch; and least abundant in South Carolina, 44 per hour of trawling and 2.1 percent of the catch.

Fewer than four catfish were taken per hour of trawling in February and March; the number increased steadily and rapidly during spring and summer, peaked at about 220 in September, declined abruptly during October and November, and continued to decline to the low in February and March (fig. 6).

The contribution of ariids to the monthly average catches was least--1.3 percent or less--from December through March, increased rapidly in April, maintained a level of about 8 to 10 percent during late spring to early fall, and declined rapidly during late fall to the winter low starting in December (fig. 7).

Bothidae.--The yearly average catch of flounders for the region was about 58 per hour of trawling, representing 3.6 percent of the total catch. They were most abundant in Georgia Inside at 84 per hour of trawling and 5.5 percent of the catch; next in Georgia Outside, 40 per hour of trawling and 2.9 percent of the catch; and least abundant in Florida Outside and South Carolina Outside, about 21 per hour of trawling and less than 1 percent of the catch.

Only 10 to 19 bothids were taken per hour of trawling from June to August; the number increased rapidly during the fall, peaked at about 175 in December, declined sharply in January, and generally continued to decline to the summer low (fig. 6).

Flounders contributed less than 2 percent of the monthly average catches from June to September, increased during October, and maintained a level of 4.6 to 6.4 from November to April (fig. 7).

Species

Seventeen species each contributed 1 percent or more of the yearly average catch for the region and, together, represented 94 percent of all fish taken and 92 to 95 percent of the fish taken in the separate areas (table 10). Seven of the 17 species (Stellifer lanceolatus, Micropogon undulatus, Leiostomus xanthurus, Menticirrhus spp., Chloroscombrus chrysurus, Cynoscion regalis, and Etropus crossotus) each represented 3 percent or more of the yearly average catch for the region and the greatest numbers of fish per hour of trawling. Together they contributed 1,247 of the 1,633 yearly average number per hour of trawling and over 76 percent of the yearly average catch for the region.

STELLIFER LANCEOLATUS.--The yearly average catch of star drum (Sciaenidae) for the region was 672 per hour of trawling, representing 41.2 percent of the total catch. They were most abundant in South Carolina Outside at 809 per hour of trawling and 38.8 percent of the catch; next in Florida Outside, 774 per hour of trawling and 28.4 percent of the catch; then Georgia Inside, 735 per hour of trawling and 48.9 percent of the catch; and least abundant in Georgia Outside, 528 per hour of trawling and 38.0 percent of the catch.

Fewer than 200 star drum were taken per hour of trawling in February; the number increased steadily through the spring, summer,

and fall, peaking at over 1,300 in November; catches began to decline in December and continued downward to the low in February (fig. 8).

Star drum contributed only 20 percent of the monthly average catch in February, but this percentage increased rapidly during the spring, summer, and fall to a peak of 52 percent in October; it then declined to 49 percent in November, and continued declining to the low in February (fig. 9).

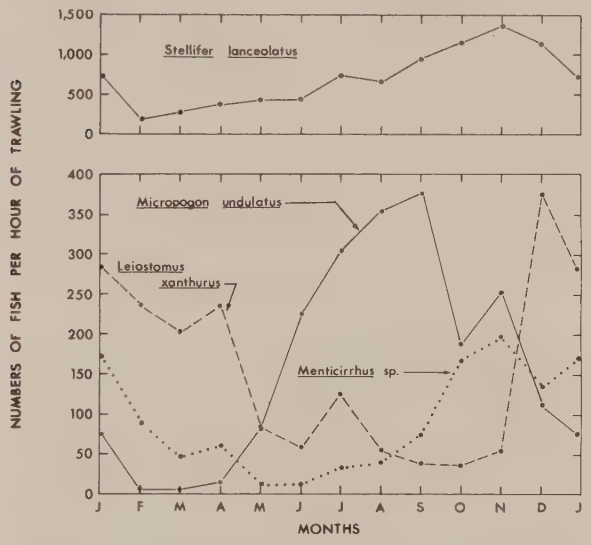

Figure 8.--Numbers of fish taken per hour of trawling during shrimp fishing, all areas combined, species Stellifer lanceolatus, Micropogon undulatus, Leiostomus xanthurus, and Menticirrhus spp., by months for all years combined.

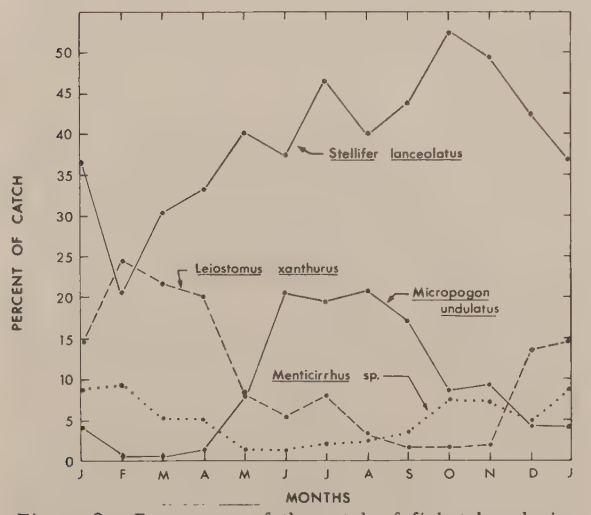

Figure 9.--Percentage of the catch of fish taken during shrimp fishing, all areas combined, species Stellifer lanceolatus, Micropogon undulatus, Leiostomus xanthurus, and Menticirrhus spp., by months for all years combined.

MICROPOGON UNDULATUS.--The yearly average catch of Atlantic croakers (Sciaenidae) for the region was 171 per hour of trawling, representing 10.5 percent of the total catch. They were most abundant in Florida Outside at 476 per hour of trawling and 17.5 percent of the catch; next in South Carolina Outside, 152 per hour of trawling and 7.3 percent of the catch; then Georgia Outside, 140 per hour of trawling and 10.1 percent of the catch; and least abundant in Georgia Inside, 129 per hour of trawling and 8.6 percent of the catch.

About 5 Atlantic croakers were taken per hour of trawling in February and March; the number increased very rapidly during spring and early summer to peak at 353 to 377 in August and September, and then decreased rapidly during the fall and winter to the low in February and March (fig. 8).

Atlantic croakers contributed less than 1 percent of the monthly average catches in February and March, increased rapidly in April and May, were a major contributor at 17.0 to 20.9 percent from June to September, and declined abruptly during the fall and winter to the low in February and March (fig. 9).

LEIOSTOMUS XANTHURUS.--The yearly average catch of spot (Sciaenidae) for the region was 144 per hour of trawling, representing 8.8 percent of the total catch. Spots were most abundant in South Carolina Outside at 466 per hour of trawling and 22.3 percent of the catch; next in Florida Outside, 156 per hour of trawling and 5.7 percent of the catch; and least abundant in Georgia, at about 115 per hour of trawling and 7.9 percent of the catch.

About 36 to 39 spots were taken per hour of trawling in September and October; the number increased during November, peaked at 377 in December, remained at a high level of 202 to 282 from January to April, and declined during spring and summer to the low in the fall (fig. 8).

Spots contributed 2 percent or less of the monthly average catches from September to November, about 14 percent during December and January, 20 to 24 percent from February to April, and declined rapidly during late spring and summer to the low in the fall (fig. 9).

MENTICIRRHUS spp.--The yearly average catch of king whiting (Sciaenidae) for the region was 78 per hour of trawling, representing 4.8 percent of the total catch. They were most abundant in Florida Outside at 198 per hour of trawling and 7.3 percent of the catch; next in South Carolina Outside, 100 per hour of trawling and 4.8 percent of the catch; then Georgia Outside, 99 per hour of trawling and 7.1 percent of the catch; and least numerous in Georgia Inside, 34 per hour of trawling and 2.3 percent of the catch.

Only 12 king whiting were taken per hour of trawling in May and June; the number increased

steadily through summer and early fall, reached peak abundance at 134 to 198 from October to January, and declined rapidly to the low in May and June (fig. 8).

The species contributed only 1.2 percent of the monthly average catches in May and June; this percentage increased slowly to about 7 percent in October and November and about 9 percent in January and February, and then declined to the low in May and June (fig. 9).

CHLOROSCOMBRUS CHRYSURUS.--The yearly average catch of bumper (Carangidae) for the region was 68 per hour of trawling, representing 4.2 percent of the total catch. They were most abundant in Florida Outside at 274 per hour of trawling and 10.1 percent of the catch; next in Georgia Outside, 93 per hour of trawling and 6.7 percent of the catch; then Georgia Inside, 14 per hour of trawling and 1 percent of the catch; and least abundant in South Carolina Outside, 11 per hour of trawling and 0.6 percent of the catch.

About 4 to 7 bumpers were taken per hour of trawling during March and April; numbers increased over late spring and early summer, held a level between 91 and 128 per hour of trawling from August to November, peaked at 182 in December, declined to 101 in January, and continued to decline to the low in March and April (table 8).

Bumpers contributed less than 1 percent of the monthly average catches in March and April; this percentage increased in May, maintained a level between 4.0 and 6.7 percent (peak in December) from June to January, and declined abruptly in February to the low in March and April (table 8).

CYNOSCION REGALIS.--The yearly average catch of gray seatrout (Sciaenidae) for the region was 63 per hour of trawling, representing 3.9 percent of the total catch. They were most abundant in South Carolina Outside at 141 per hour of trawling and 6.8 percent of the catch; next in Georgia Inside, 65 per hour of trawling and 4.3 percent of the catch; then Georgia Outside, 49 per hour of trawling and 3.6 percent of the catch; and least numerous in Florida Outside, 46 per hour of trawling and 1.7 percent of the catch.

Only 13 gray seatrout were taken per hour of trawling in March; the number generally increased during spring and early summer, ranged from 71 to 95 in August to December, peaked at 133 in January, and declined abruptly to the low in March (table 8).

The species contributed only 1.4 percent of the monthly average catch in March, fluctuated between 2.6 and 5.9 percent from April to December, peaked at 6.9 percent in January, and declined to the low in March (table 8).

ETROPUS CROSSOTUS.--The yearly average catch of fringed flounder (Bothidae) for the region was 49 per hour of trawling, representing 3.0 percent of the total catch. They were most numerous in Georgia Inside at 74 per hour of trawling and 4.9 percent of the catch; next in Georgia Outside, 30 per hour of trawling and 2.2 percent of the catch; then Florida Outside, 19 per hour of trawling and 0.7 percent of the catch; and least abundant in South Carolina Outside, 15 per hour of trawling and 0.7 percent of the catch.

Only 2 fringed flounders were taken per hour of trawling in June; the number increased steadily during summer and early fall, rose sharply in October and November to 78 and 122, peaked at 168 in December, declined sharply to 86 in January, and continued to decline to the low in June (table 8).

The species contributed less than 1 percent of the monthly average catches from May to August; this percentage increased in September, and was maintained at 3.5 to 6.2 percent (peak in December) from October to April (table 8).

SOUTH CAROLINA OUTSIDE

Figure 4 shows the monthly average number of fish per hour of trawling for all species combined and for the family Sciaenidae. From a low of 555 fish per hour of trawling in April the number rose steadily through the summer to 2,882 to 3,338 during September and October and peaked at 3,571 to 3,693 in December and January (fig. 4). I do believe the relatively small number of fish captured in November (1,200 per hour of trawling) may be due to a sampling error. Number of fish taken declined abruptly in February and continued to decline to the low in April. The yearly average catch for all species combined was almost 2,100 fish per hour of trawling, of which over 1,700 were Sciaenidae--or more than 3 of every 4 fish taken.

Families

Five families of fishes (Sciaenidae, Clupeidae, Gadidae, Engraulidae, and Ariidae--in that order) were taken in greatest numbers in South Carolina and together contributed 1,955 of the 2,086 yearly average number per hour of trawling, and almost 94 percent of the yearly average catch.

Sciaenidae.--The yearly average catch of croakers for the area was 1,731 per hour of trawling, representing 82.9 percent of the total catch.

Only 267 and 233 sciaenids were taken per hour of trawling in March and April; the number increased rapidly during the spring and summer, to 3,008 and 2,470 in September and October, peaked at 3,383 and 3,206 in December and January, declined rapidly in February, and continued to decline to the low in March and April (fig. 4).

The sciaenids contributed 29 and 42 percent to the monthly average catches in March and April, 61 and 63 percent during May and June, and 87 to 94 percent from July to January; this contribution declined to 74 percent in February, and then dropped abruptly to the low in March and April (table 11). Except for March and April, sciaenids were taken throughout the year in greater numbers than all other families combined.

Clupeidae.--The yearly average catch of clupeids for the area was 73 per hour of trawling, representing 3.5 percent of the total catch.

Less than 6 clupeids were taken per hour of trawling from July to December; the number rose abruptly to a peak of 345 and 275 in January and February, decreased irregularly during the spring, and continued to the seasonal low that began in July (table 11).

The clupeids contributed from 0.3 to less than 0.1 percent of the monthly average catches from July to December, and 7.9 to 14.3 percent from January to June (except for April); the peak was in February (table 11).

Gadidae.--The yearly average catch of gadids for the area was 54 per hour of trawling, representing 2.6 percent of the total catch.

No gadids were captured from July to December, and only a few in January; the number increased sharply to 71 per hour of trawling in February, peaked at 305 and 208 in March and April, and fell abruptly to 1 or less in May and June, and none in July (table 11).

Gadids made up 0.1 percent of the monthly average catch in January, 3.7 percent in February, 32.6 and 37.5 percent in March and April, 0.1 percent in May and June, and were not taken in July to December (table 11).

Engraulidae.--The yearly average catch of engraulids for the area was 53 per hour of trawling, representing 2.5 percent of the total catch.

Only 1 to 12 were taken per hour of trawling from July to September; the number increased irregularly during the fall and winter, reached 72 in February, peaked at 235 in May, declined in June, and continued to decline to the low in July to September (table 11).

The engraulids contributed from less than 0.05 to 0.7 percent of the monthly average catches from July to September, increased generally to 1.6 to 3.7 percent during late fall and winter, peaked during the spring at 16.1 and 16.6 percent in March and May, declined to 11.2 percent in June, and continued to the low in July to September (table 11).

Ariidae.--The yearly average catch of sea catfish for the area was 44 per hour of trawling, representing 2.1 percent of the total catch.

No sea catfish were captured from December to March, and only a few were taken in April; the number per hour of trawling increased almost steadily from May through the summer, peaked at 153 and 184 in September and October, and dropped abruptly to only 0.2 per hour of trawling in November (table 11).

Catfish contributed 1.2 to 2.3 percent of the monthly average catches in May and June, peaked at 4.6 to 6.4 percent in September and October, and dropped abruptly to only 0.2 in November (table 11).

Species

Six species of fishes (Stellifer lanceolatus, Leiostomus xanthurus, Micropogon undulatus, Cynoscion regalis, Menticirrhus spp., and Brevoortia spp.--in that order) were taken in greatest numbers and together contributed 1,743 of the 2,086 yearly average number of fish caught per hour of trawling, and over 83 percent of the yearly average catch for the South Carolina grounds.

STELLIFER LANCEOLATUS.--The yearly average catch of star drum for the area was 809 per hour of trawling, representing 38.8 percent of the total catch.

Only 89 were taken per hour of trawling in March; the number increased rapidly during late spring and early summer and exceeded 1,000 in July and August, peaked at 2,481 in September, declined to 1,638 in October, and generally continued to decline to the low in March (table 12).

The species contributed 7.5 to 21.2 percent of the monthly average catches from December to March (less than 10 percent except in January), 27.9 percent in April, 41 to 74 percent in May to November (peak in September--see table 12).

LEIOSTOMUS XANTHURUS.--The yearly average catch of spot for the area was 466 per hour of trawling, representing 22.3 percent of the total catch.

Numbers per hour of trawling were low in two periods--one in the fall and one in the spring. The monthly average catch per hour of trawling was 9 and 4 in September and October, 24 in November, peaked at 2,496 in December, declined to 1,457 and 1,096 in January and February, dropped sharply to 6 to 10 in March to May, increased to 47 in June, rose to a summer high of 138 in July, declined in August, and continued to decline to the fall low (table 12).

Spots made up only small percentages of the monthly average catches in two periods, fall and spring. They contributed only 0.3 and 0.2 percent in September and October and 1.9 in November, peaked at 69.9 percent in December, maintained a high level of 39.5 and 57.0 percent in January and February, fell to 0.6 to 1.9 percent from March to May, and made up 3.0 to 7.0 percent of the catch in June to August (table 12).

MICROPOGON UNDULATUS.--The yearly average catch of Atlantic croakers for the area was 152 per hour of trawling, representing 7.3 percent of the total catch.

Only 1.1 to 2.5 were taken per hour of trawling from February to April; the number increased in May and June to 11 to 17, maintained a general level of about 202 to 313 from July to September, peaked at 457 in October, declined to 201 and 161 in November and December, and continued to decline to the low in late winter and early spring (table 12).

The species contributed only 0.1 to 1.6 percent of the monthly average catches from January to June. It generally contributed about 14 to 17 percent of the catch from July to November, declined in December, and continued to decline to the low in January to June (table 12).

CYNOSCION REGALIS.--The yearly average catch of gray seatrout for the area was 141 per hour of trawling, representing 6.8 percent of the total catch.

Only 1.5 were taken per hour of trawling in March; the number rose steadily through the spring, summer, and fall, reached 186 to 221 in November and December, peaked at 698 in January, and declined sharply in February to the low in March (table 12).

The species contributed 0.2 to 1.7 percent of the monthly average catches from February to April, 2.2 to 4.6 percent in May to September, and 6.2 to 18.9 percent from October to January (peak in January--see table 12.)

MENTICIRRHUS spp.(mostly M. AMERICANUS.--The yearly average catch of king whiting for the area was 100 per hour of trawling, representing 4.8 percent of the total catch.

About 10 king whiting were taken per hour of trawling in June; the numbers fluctuated between 52 and 163 from July to March (peak in September), dropped to 45 in April, and continued to decline to the low in June (table 12).

The species contributed only 1.5 and 1.0 percent of the monthly average catches in May and June; from July to January it contributed fluctuating percentages of 2.9 to 6.8, peaked at 16.6 in March, and declined abruptly in April to the low in May and June (table 12).

BREVOORTIA spp.(mostly B.TYRANNUS).--The yearly average catch of menhaden in the South Carolina area was 73 per hour of trawling, representing 3.5 percent of the total catch.

Only 0.3 to 1.6 menhaden were taken per hour of trawling from September to November; the number increased in December, peaked at 345 and 275 in January and February, fluctuated between 75 and 114 from March to June, declined in July, and continued to drop to the low in September to November (table 12).

The species contributed only 0.1 to 0.3 percent of the monthly average catches from July to December, but made up 7.9 to 14.3 percent from January to June (except for April); the peak was in February (table 12).

GEORGIA OUTSIDE

Figure 5 shows the monthly average number of fish per hour of trawling for all species combined and for the family Sciaenidae. From a low of 591 and 685 fish per hour of trawling in March and April the number increased during late spring and summer to a peak at 2,667 in September, and remained at the high level of 1,953 to 2,259 from October to December. The number taken dropped sharply in January and continued to decline to the low in March and April. The yearly average catch for all species combined was nearly 1,400 fish per hour of trawling, of which about 1,000 were Sciaenidae--or over 2 of every 3 fish taken.

Families

Five families of fishes (Sciaenidae, Carangidae, Ariidae, Clupeidae, and Bothidae--in that order) were taken in largest numbers in the Georgia Outside area and together contributed 1,226 of the 1,391 yearly average number per hour of trawling, and 88.0 percent of the yearly average catch.

Sciaenidae.--The yearly average catch of croakers for the area was 983 per hour of trawling, representing 70.6 percent of the total catch.

Only 319 sciaenids were taken per hour of trawling in March; the number increased slowly but steadily over the spring and summer to 951 in August, peaked at 1,907 in September, maintained a high level of 1,550 to 1,764 from October to December, declined to 811 in January, and continued to decline to the low in March (fig. 5).

The sciaenids contributed least to the monthly average catches in February and March at 55.5 and 54.2 percent; from April to January the family reached and maintained a level of 62.2 to 80.7 percent of the catch (peak in October), and then declined abruptly to the low in February and March (table 11). During every month of the year sciaenids were taken in greater numbers than were all other families combined.

Carangidae.--The yearly average catch of carangids for the area was 111 per hour of trawling, representing 8.0 percent of the total catch.

About 2 carangids were taken per hour of trawling in April; the number increased rapidly in late spring and summer to 186 in August and the peak of 321 in September, declined irregularly during late fall and early winter but

maintained a value of 121 to 192 from November to January, declined sharply in February, and continued to decline to the low in April (table 11).

The carangids contributed 0.2 percent of the monthly average catch in April, 2.8 in May, and 11.4 to 15.8 percent in June to September; the percentage was between 3.8 and 9.8 in October to February, and continued to decline to the low in April (table 11).

Ariidae.--The yearly average catch of sea catfish for the area was 47 per hour of trawling, representing 3.4 percent of the total catch.

No sea catfish were captured in February and only 0.2 per hour of trawling in March; the number rose to about 22 in April and generally continued to rise during the late spring and summer, peaked at 171 in September, was 97 to 113 in October and November, declined abruptly to 3.5 and 2.0 in December and January, and to none in February (table 11).

The ariids contributed only 0.2 percent or less of the monthly average catches in December, January, and March (nil in February), and generally contributed about 3 to 6.5 percent of the catch from April to November (peak in September--see table 11).

Clupeidae.--The yearly average catch of clupeids for the area was 44 per hour of trawling, representing 3.1 percent of the total catch.

Only 0.4 to 1 clupeid was taken per hour of trawling from August to November; the number rose in December and January, peaked at 224 in February, and generally declined during spring and early summer to the low in August to November (table 11).

The clupeids contributed from less than 0.05 percent to 0.6 percent of the monthly average catches from July to December; they were most abundant from January to March at 8.7 to 22.0 percent of the catch (peak in February) and were captured in moderate abundance in spring and early summer (table 11).

Bothidae.--The yearly average catch of flounders for the area was 40 per hour of trawling, representing 2.9 percent of the total catch.

About 8 to 35 bothids were taken per hour of trawling from March to September; the number increased steadily in the fall and early winter, peaked at 93 in January, and declined rapidly in February to the low in March to September (table 11).

The bothids contributed only 0.6 and 1.0 percent of the monthly average catches in August and September; their peak contributions were 7.5 and 5.0 percent in January and February (table 11). During the remaining months they made up 1.6 to 3.9 percent of the catch.

Species

Six species of fishes (Stellifer lanceolatus, Micropogon undulatus, Leiostomus xanthurus, Menticirrhus spp., Chloroscombrus chrysurus, and Cynoscion regalis--in that order) were captured in greatest numbers and together contributed 1,020 of the 1,391 yearly average number per hour of trawling, or 73.3 percent of the yearly average catch for the Georgia Outside area.

STELLIFER LANCEOLATUS.--The yearly average catch of star drum for the area was 528 per hour of trawling, representing 38.0 percent of the total catch.

About 119 were taken per hour of trawling in March; the number increased during spring and summer, reached 805 to 1,090 during the fall, peaked at 1,117 in December, declined abruptly in January and continued to decline to the low in March (table 12).

The species contributed 13.6 and 20.2 percent of the monthly average catches in February and March, 28.7 to 55.8 percent in April to January (peak in October--see table 12).

MICROPOGON UNDULATUS.--The yearly average catch of Atlantic croakers for the area was 140 per hour of trawling, representing 10.1 percent of the total catch.

Only 1 to 3 were taken per hour of trawling from February to April; the number increased rapidly over late spring and summer to 258 by August, peaked at 676 in September, declined abruptly to 202 in October, and generally continued to decline to the low in February to April (table 12).

Croakers contributed 0.2 to 0.5 percent of the monthly average catches from February to April, 12.2 to 25.4 percent from June to September (peak in September). They declined rapidly in late fall and winter to the low in February to April (table 12).

LEIOSTOMUS XANTHURUS.--The yearly average catch of spot for the area was 109 per hour of trawling, representing 7.8 percent of the total catch.

About 14 to 58 spots were taken per hour of trawling from June to November; numbers taken were greatest during winter and early spring, and the peak was 287 in December (table 12).

Spots contributed 0.9 to 4.4 percent of the monthly average catches from June to November, 12.7 and 7.1 percent during December and January, and their highest percentage during late winter and spring with a peak of 25.8 and 26.6 percent in February and March (table 12).

MENTICIRRHUS spp. (mostly M. AMERICANUS).--The yearly average catch of king whiting for the area was 99 per hour of

trawling, representing 7.1 percent of the total catch.

About 17 to 22 were taken per hour of trawling in May and June; numbers increased steadily over the summer and early fall, were 175 to 230 from October to January (peak in November), and generally declined during the late winter and early spring to the low in May and June (table 12).

The species contributed 2.3 to 4.1 percent of the monthly average catches from May to September and 7.8 to 16.3 percent from October to April; the peak was in January (table 12).

CHLOROSCOMBRUS CHRYSURUS.--The yearly average catch of bumpers for the area was 93 per hour of trawling, representing 6.7 percent of the total catch.

Only one bumper was taken per hour of trawling in March; the number increased steadily in late spring and summer to peak at 306 in September, was 36 to 120 during late fall and winter, and continued to decline to the low in April (table 12).

Bumpers contributed 0.1 percent of the monthly average catch in April; 10.7 to 15.3 percent from June to September (peak in June), were generally about 3.0 to 9.7 percent from October to February, and declined rapidly to the low in April (table 12).

CYNOSCION REGALIS.--The yearly average catch of gray seatrout for the area was 49 per hour of trawling, representing 3.6 percent of the total catch.

Six were taken per hour of trawling in March; the numbers generally increased over the spring and summer, maintained a level of about 48 to 70 from July to November, peaked at 120 in December, and declined rapidly in January and February to the low in March (table 12).

Gray seatrout generally contributed their lowest percentage of the monthly average catches--1.1 to 4.4--from May to November; their largest contribution was generally in December to April, and the peak was 6.5 in April (table 12).

GEORGIA INSIDE

Figure 5 shows the monthly average number of fish per hour of trawling for all species combined and for the family Sciaenidae. From a low of nearly 500 fish per hour of trawling in February, the number increased in the spring, summer, and early fall to a peak of over 2,700 in November and December. The secondary peaks of over 1,400 in April and 2,100 in July probably resulted from movement of fish between the inside and outside waters. The numbers taken decreased sharply in January and continued to the low in February. The yearly average for all species combined was over 1,500 fish per hour of trawling, of which over 1,000 were sciaenids--or 2 of every 3 fish taken.

Families

Five families of fishes (Sciaenidae, Ariidae, Bothidae, Soleidae and Cynoglossidae combined, and Engraulidae--in that order) were taken in largest numbers in the Georgia Inside area and together contributed 1,361 of the 1,503 yearly average number per hour of trawling, and 90.5 percent of the yearly average catch.

Sciaenidae.--The yearly average catch of croakers for the area was 1,096 per hour of trawling, representing 72.9 percent of the total catch.

Only 212 sciaenids were taken per hour of trawling in February; the number generally increased over the spring and early summer, ranged from 1,085 to 1,872 in July to October, peaked at 2,078 and 2,011 in November and December, declined sharply to 1,128 in January, and fell to the low in February (table 11).

The sciaenids contributed least--42.6 percent--to the monthly average catch in February, maintained a level of 62.0 to 71.7 percent from March to June, peaked at 86.5 in July, contributed from 72.5 to 77.0 percent from August to January, and declined sharply to the low in February (table 11).

Ariidae.--The yearly average catch of sea catfish for the area was 95 per hour of trawling, representing 6.3 percent of the total catch.

Less than 1 catfish was taken per hour of trawling from December to March; the number rose sharply in April, was 110 to 160 from May to July, peaked at 256 in August, began to decline in September, and continued declining to the low from December to March (table 11).

Ariids contributed only 0.05 to 0.6 percent of the monthly average catches from November to March. This percentage increased sharply in April, generally remained between 10.1 and 13.9 percent from May to September, declined abruptly in October, and continued declining to the low from November to March (table 11).

Bothidae.--The yearly average catch of flounders for the area was 84 per hour of trawling, representing 5.5 percent of the total catch.

About 10 to 22 flounders were taken per hour of trawling from May to August; the number rose steadily during the fall to 281 in November and a peak of 424 in December, declined abruptly in January but ranged between 71 and 135 from January to April, and then dropped abruptly to the low in May to August (table 11).

The bothids contributed 0.9 to 2.6 percent of the monthly average catches from May to September and 7.7 to 15.8 percent from October to April (peak in December--see table 11).

Soleidae and Cynoglossidae (combined).--The yearly average catch of soles and tonguefishes for the area was 43 per hour of trawling, representing 2.9 percent of the total catch.

Only 6 to 10 were taken per hour of trawling in February and March. The number generally increased in spring, summer, and fall, to a peak of 90 in December; dropped abruptly in January; and continued to decline to the low in February and March (table 11).

The soles and tonguefishes contributed 1.0 to 1.7 percent of the monthly average catches from January to March and 2.0 to 4.6 percent in April to December; the peak was in August (table 11).

Engraulidae.--The yearly average catch of anchovies for the area was 43 per hour of trawling, representing 2.9 percent of the total catch.

Only 6 to 9 anchovies were taken per hour of trawling in July and August; the number increased sharply to 96 in October, peaked at 176 in November, declined sharply in December, fluctuated between 31 and 72 (highest in April) from December to June, and declined abruptly to the low in July and August (table 11).

Anchovies contributed only 0.4 percent of the monthly average catches in July and August; peak contributions of 5.9 and 6.5 percent were in October and November; the percentages fluctuated between 2.4 to 5.0 percent from December to June (table 11).

Species

Six species of fish (Stellifer lanceolatus, Micropogon undulatus, Leiostomus xanthurus, Etropus crossotus, Cynoscion regalis, and Galeichthys felis--in that order) were captured in greatest numbers in the Georgia Inside area and together contributed 1,180 of the 1,503 yearly average number per hour of trawling, and 78.5 percent of the yearly average catch.

STELLIFER LANCEOLATUS.--The yearly average catch of star drum for the area was 735 per hour of trawling, representing 48.9 percent of the total catch.

Only 139 star drum were taken per hour of trawling in February; the number increased during the spring and early summer (reaching a level of 265 to 485 from March to June), fluctuated between 848 and 1,132 from July to October, peaked at 1,894 and 1,823 in November and December, declined sharply in January, and continued to decline to the low in February (table 12).

The species contributed 28.0 to 32.8 percent of the monthly average catches from February to April; the percentage fluctuated between about 37 and 70 from May to January, with the peak in November (table 12).

MICROPOGON UNDULATUS.--The yearly average catch of Atlantic croaker for the area was 129 per hour of trawling, representing 8.6 percent of the total catch.

About 3 to 15 croakers were taken per hour of trawling from December to March; the number rose in April and May, remained between 310 and 450 from June to August (peak in July), declined abruptly to 111 in September, and continued to decline to the low in December to March (table 12).

The species contributed 0.1 to 1.0 percent of the monthly average catches from November to March; this percentage increased in April and May, peaked at 23.4 and 20.8 in June and July, declined to 17.0 in August, and continued to decline to the low in November to March (table 12).

LEIOSTOMUS XANTHURUS.--The yearly average catch of spot for the area was 119 per hour of trawling, representing 8.0 percent of the total catch.

About 20 to 38 spot were taken per hour of trawling from August to December; peak abundance of 264 and 376 was in March and April, and a secondary peak of 196 was in July (table 12).

The species contributed only 1.0 to 1.7 percent of the monthly average catches from August to December; its greatest contributions were 25.6 and 25.9 percent in March and April (table 12).

ETROPUS CROSSOTUS.--The yearly average catch of fringed flounder for the area was 74 per hour of trawling, representing 4.9 percent of the total catch.

Only 2 fringed flounders were taken per hour of trawling in June; the number increased over the summer and fall to 278 in November, peaked at 420 in December, decreased sharply to 131 in January, and generally declined in late winter and spring to the low in June (table 12).

The species contributed only 0.2 to 0.9 percent of the monthly average catches from May to August; the percentage increased in September and ranged from 6.3 to 15.7 percent in October to April; the peak was in December (table 12).

CYNOSCION REGALIS.--The yearly average catch of gray seatrout for the area was 65 per hour of trawling, representing 4.3 percent of the total catch.

Ten to 15 gray seatrout were taken per hour of trawling in February and March, about 38 to 117 in April to January (the peak of about 72 to 117 extended from July to October--it was highest in August), and 42 to 52 from November to January (table 12).

The species contributed 1.5 to 2.0 percent of the monthly average catches from November to March (except for January at 3.3) and 3.5 to 6.4 percent from April to October; the peak was in August (table 12).

GALEICHTHYS FELIS.--The yearly average catch of sea catfish for the area was 57 per hour of trawling, representing 3.8 percent of the total catch.

No sea catfish were taken in December, and only 0.8 or less per hour of trawling from January to March; the number rose abruptly to 52 in April, generally increased over late spring and early summer, peaked at 152 in August, declined abruptly to 40 in September, and continued to decline to the low beginning in December (table 12).

The species contributed less than 0.3 percent of the monthly average catches from November to March (none in December); from May to August (except in July) the species contributed 8.0 to 8.6 percent, declined sharply in September, and continued to decline to the low in November to March (table 12).

GEORGIA COMBINED

Figure 5 shows the monthly average number of fish per hour of trawling for all species combined and for the family Sciaenidae. From a low of about 800 to 900 fish per hour of trawling in February and March the number increased steadily through the spring and early summer, reached about 1,600 to 1,800 during July to October, peaked in November and December at about 2,400, declined sharply in January to about 1,400, and continued to decline to the low in February and March. The yearly average catch for all species combined was over 1,400 fish per hour of trawling, of which over 1,000 were sciaenids--or about 2 of every 3 fish caught.

The combining of catches from Georgia Outside and Georgia Inside tends to stabilize the seasonal changes in average numbers of fish per hour of trawling (fig. 5). Lowest catches are in late winter and early spring; numbers increase steadily over the late spring, summer, and early fall; and peak catches are during late fall and early winter. This general pattern exists in the two basic Georgia areas but is somewhat obscured. These differences may be explained by the considerable movement of fish between inside and outside grounds.

Detailed discussions of families and species are not made for the Georgia Combined area since this account was given for the two basic areas (Georgia Outside and Georgia Inside). Details of the Georgia combined data are in tables 1, 6, 9, 10, 11, and 12, and figure 5.

FLORIDA OUTSIDE

Figure 4 shows the monthly average number of fish per hour of trawling for all species combined and for the family Sciaenidae. From a low of 261 and 369 fish per hour of trawling in May and June, the number increased sharply through the summer. It reached 4,392 by September, peaked at 5,637 and 5,470 in October and November, began to decline in December but maintained a high level of 3,756 and 3,376 in December and January, declined to 1,303 to 1,746 during February to April, and then dropped abruptly to the low in May and June. The yearly average catch for all species combined was over 2,700 fish per hour of trawling, of which nearly 2,000 were sciaenids--or more than 2 of every 3 fish captured.

Families

Three families of fishes (Sciaenidae, Carangidae, and Ariidae--in that order) were taken in largest numbers in the Florida area and together contributed 2,504 of the 2,725 yearly average number per hour of trawling, and 92.1 percent of the yearly average catch.

Sciaenidae.--The yearly average catch of croakers for the area was 1,962 per hour of trawling, representing 72.0 percent of the total catch.

Only 135 and 206 sciaenids were taken per hour of trawling in May and June; the number increased sharply in the summer, reaching 1,602 in August, 3,063 in September, peaked at 4,130 and 4,211 in October and November, declined to 1,824 and 2,569 in December and January, maintaintained a fluctuating level of 1,078 to 1,421 from February to April, and declined abruptly to the low in May and June (figure 4; table 11).

The sciaenids contributed least to the monthly average catches in May and June at 51.9 and 55.9 percent and in December at 48.6 percent; from July to April (except December) they contributed about 68 to 83 percent of the catch; thus throughout the year (except in December) sciaenids were captured in greater numbers than all other families of fish combined (table 11).

Carangidae.--The yearly average catch of carangids for the area was 388 per hour of trawling, representing 14.4 percent of the total catch.

Only 14 carangids were taken per hour of trawling in February; the number increased steadily over the spring, summer, and fall to 953 and 732 in October and November, peaked at 1,555 in December, dropped abruptly to 476 in January, and to the low in February (table 11).

The carangids contributed only 1.0 percent of the monthly average catch in February; this

percentage increased in April and reached 28.4 to 24.6 percent in May and June, dropped abruptly to 5.8 to 7.9 from July to September, increased to 16.9 to 13.4 in October and November, peaked at 41.4 percent in December, declined sharply to 14.1 percent in January and fell to the low in February (table 11).

Ariidae.--The yearly average catch of sea catfish for the area was 153 per hour of trawling, representing 5.7 percent of the total catch.

Less than 1 catfish was taken per hour of trawling in May; the number rose slowly over the summer, peaked abruptly at 716 in September, declined to 237 and 227 in October and November, and generally declined over the winter and early spring to the low in May (table 11).

The family contributed only 0.2 to 0.7 percent of the monthly average catches from May to July; the peak contribution of 18.2 percent was in September; the percentage held at about 4 percent in October, November, and January, and declined from February to April to the low in May (table 11).

Species

Eight species of fish (Stellifer lanceolatus, Micropogon undulatus, Chloroscombrus chrysurus, Cynoscion nothus, Menticirrhus spp., Leiostomus xanthurus, Bagre marinus, and Vomer setapinnis--in that order) were captured in greatest numbers and together contributed 2,374 of the 2,725 yearly average number per hour of trawling, and 87.2 percent of the yearly average catch.

STELLIFER LANCEOLATUS.--The yearly average catch of star drum for the Florida area was 774 per hour of trawling, representing 28.4 percent of the total catch.

No star drum were captured in May and only 13 per hour of trawling in June; the number increased rapidly during the summer to 1,212 in September, peaked at 2,169 in October, declined to 1,642 in November and 1,482 in January, and continued to decline in late winter and early spring to the low in May (table 12).

The species was not taken in May, but contributed 3.6 percent of the monthly average catch in June, and 16.4 and 15.4 percent in July and August; it contributed 27.0 to 38.5 percent of the monthly average catches in September to November, 42 to 53 percent January to March (peak in March), and then declined abruptly to the low in May (table 12).

MICROPOGON UNDULATUS.--The yearly average catch of Atlantic croaker for the area was 476 per hour of trawling, representing 17.5 percent of the total catch.

Only 16 and 20 croakers were taken per hour of trawling in March and April; the number generally increased during late spring and summer to 1,018 in September, peaked at 1,198 in November, declined abruptly to 587 in December, and continued the decline to the low in March and April (table 12).

Croakers contributed 1.0 to 1.7 percent of the monthly average catches from February to April, 11.7 to 39.8 percent from May to December (peak in July and August), declined abruptly in January to the low in February to April (table 12).

CHLOROSCOMBRUS CHRYSURUS.--The yearly average catch of bumper was 274 per hour of trawling, representing 10.1 percent of the total catch.

Only 4 bumpers were taken per hour of trawling in February; the number generally increased over the spring, summer, and fall to 624 and 458 in October and November, peaked at 1,107 in December, declined abruptly to 331 in January, and continued its decline to the low in February (table 12).

Bumpers contributed only 0.3 to 0.9 percent of the monthly average catches in February and March; they had two widely separated peaks of contributions--one in May and June at 27.8 and 21.6 percent and the other in December at 29.5 percent; they represented 5.7 to 11.1 percent of the catch from July to November and 9.8 percent in January (table 12).

CYNOSCION NOTHUS.--The yearly average catch of white seatrout for the area was 262 per hour of trawling, representing 9.6 percent of the total catch.

Only 23 white seatrout were taken per hour of trawling in May; the number generally increased over late spring, summer, and fall, to 492 in November, peaked at 611 in December, and generally declined through the winter; a second peak of 500 per hour of trawling occurred in April, followed by an abrupt decline to the low in May (table 12).

Percentages of the monthly average catches contributed by white seatrout fluctuated from 4.5 to 9.7 from July to November, and ranged from 6.3 to 38.4 percent from December to June, with isolated peaks at 16.3 in December, 38.4 in April (the highest), and 21.7 in June (table 12).

MENTICIRRHUS spp.--The yearly average catch of king whiting for the area was 198 per hour of trawling, representing 7.3 percent of the total catch.

Only 1 to 3 king whiting were taken per hour of trawling in May and June; the number increased over the summer to 286 in September, peaked at 754 in October, declined to 448 in November, continued to decline over the winter, displayed a secondary peak of 248 in April, and dropped abruptly to the low in May and June (table 12).

The species contributed only 0.4 percent of the monthly average catch in June; the percentage fluctuated between 2.8 and 9.1 from July to

March (except October at 13.4 percent); the peak contribution was in April at 19.1 percent (table 12).

LEIOSTOMUS XANTHURUS.--The yearly average catch of spot for the area was 156 per hour of trawling, representing 5.7 percent of the total catch.

Only 9 spots were taken per hour of trawling in May; the number increased over the summer and from July to November fluctuated between 123 and 214, peaked at 218 and 230 in January and February, declined sharply in March, and continued declining to the low in May (table 12).

Spots contributed only 1.5 to 3.8 percent of the monthly average catches in September to December; two widely separated peaks of contribution occurred--one at 15.6 percent in February and another at 20.6 percent in July (table 12).

BAGRE MARINUS.--The yearly average catch of gafftopsail catfish was 121 per hour of trawling, representing 4.5 percent of the total catch.

Only 0.3 to 2 gafftopsail catfish were taken per hour of trawling in May to August; the number peaked abruptly at 692 in September, fluctuated between 80 and 186 from October to January, and declined abruptly to about 4 to 19 in February to April and to the low in May to August (table 12).

The species contributed only 0.1 to 1.1 percent of the monthly average catches from February to August, a peak contribution of 15.4 percent in September, and 2.1 to 4.3 percent in October to January (table 12).

VOMER SETAPINNUS.--The yearly average catch of moonfish was 110 per hour of trawling, representing 4.1 percent of the total catch.

Only one moonfish was taken per hour of trawling in July; the number increased steadily over late summer and fall, peaked at 443 in December, declined abruptly to 131 in January, and generally continued to decline to the low in July (table 12).

Moonfish contributed only 0.1 percent of the monthly average catch in July, 3.9 to 11.8 percent in October to January (peak in December), and 0.3 to 2.6 percent from February to June (table 12).

SOUTH CAROLINA, GEORGIA, AND FLORIDA OUTSIDE COMBINED

Table 7 shows the monthly average numbers of fish per hour of trawling (all species combined) in the outside grounds. From a low of about 700 to 900 fish per hour of trawling from March to June the number taken increased rapidly to 1,217 and 1,539 in July and August, peaked at 3,158 in September, maintained a high level of 2,173 to 2,795 from October to January, declined sharply to 1,192 in February, and continued to the low in March to June. The yearly average catch for all species combined was 1,752 fish per hour of trawling, of which 1,279 were sciaenids--or about 3 of every 4 fish caught.

Families and species data for the combined outside category are not discussed, as this description was given for the three basic areas (South Carolina Outside, Georgia Outside, and Florida Outside). Details of the data for this combination are in tables 1, 7, 9, and 10.

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1949. The shrimp fishery of the southern United States. Fish Wildl. Serv., Commer. Fish Rev. 11(2): 1-17.

Table 1.--Number of hours of trawling by month in all basic areas and certain combinations of areas, 1931-35

Month	South Carolina Outside	Georgia Inside	Georgia Outside	Georgia Combined	Florida Outside	South Carolina, Georgia, and Florida Outside Combined	All areas combined
Jan.	5.50	19.75	20.00	39.75	8.50	34.00	53.75
Feb.	5.50	26.25	38.75	65.00	9.50	53.75	80.00
March	5.50	42.50	26.00	68.50	6.00	37.50	80.00
April	6.50	58.00	25.25	83.25	6.50	38.25	96.25
May	3.00	49.75	22.00	71.75	3.00	28.00	77.75
June	3.00	41.50	18.00	59.50	3.00	24.00	65.50
July	8.00	31.00	30.00	61.00	14.00	52.00	83.00
Aug.	5.00	46.00	32.00	78.00	11.00	48.00	94.00
Sept.	6.00	53.00	29.25	82.25	10.00	45.25	98.25
Oct.	5.00	33.00	27.50	60.50	7.00	39.50	72.50
Nov.	5.00	15.25	19.00	34.25	7.50	31.50	46.75
Dec.	5.50	19.25	26.50	45.75	8.50	40.50	59.75
Total	63.50	435.25	314.25	749.50	94.50	472.25	907.50

Table 2.--Fish taken by trawling, South Carolina Outside, M/V Launch 58, 1933-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value of less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.	-	-	-	-	-	0.3 * 1	-	2.0 0.1 10	-	-	-	-	0.2 * 11
Scoliodon terraenovae	-	-	-	-	-	-	1.5 0.1 12	-	-	0.2 * 1	-	-	0.2 * 13
Sphyrna tiburo	-	-	-	-	0.3 * 1	-	0.5 * 4	2.4 0.1 12	-	0.4 * 2	0.4 * 2	-	0.3 * 21
Sphyrna zygaena	-	-	-	-	-	1.0 0.1 3	0.3 * 2	-	-	-	-	-	0.1 * 5
Pristis pectinatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhinobatos lentiginosus	-	-	-	-	-	-	-	-	-	-	-	-	-
Torpedo nobiliana	-	-	-	-	-	-	-	-	-	-	-	-	-
Raja eglanteria	5.8 0.2 32	4.5 0.2 25	5.3 0.6 29	3.7 0.7 24	-	-	1.1 0.1 9	-	0.7 * 4	5.6 0.2 28	2.4 0.2 12	5.1 0.1 28	3.0 0.1 191
Dasyatis americana	-	0.4 * 2	-	14.5 2.6 94	-	1.3 0.1 4	4.3 0.2 34	0.2 * 1	0.3 * 2	-	0.8 0.1 4	-	2.2 0.1 141
Dasyatis centroura	-	-	-	-	-	-	-	-	-	-	-	-	-
Dasyatis sabina	1.5 * 8	-	1.1 0.1 6	1.2 0.2 8	-	-	-	-	2.7 0.1 16	2.4 0.1 12	4.0 0.3 20	3.5 0.1 19	1.4 0.1 89
Gymnura micrura	0.7 * 4	-	-	0.8 0.1 5	-	0.7 0.1 2	3.6 0.2 29	2.0 0.1 10	2.0 0.1 12	4.4 0.2 22	1.6 0.1 8	0.2 * 1	0.5 0.1 93
Aetobatus narinari	-	-	-	-	-	-	-	-	-	-	0.2 * 1	0.2 * 1	* * 2
Rhinoptera bonasus	-	-	-	0.2 * 1	-	0.3 * 1	-	-	-	-	-	-	* * 2
Acipenser oxyrhynchus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lepisosteus osseus	-	-	-	-	-	-	-	-	-	-	-	-	-
Brevoortia spp. (tyrannus and smithi)	345.1 9.3 1,898	275.1 14.3 1,513	75.8 8.1 417	9.2 1.7 60	114.7 7.9 344	101.7 9.4 305	5.8 0.3 46	2.4 0.1 12	0.3 * 2	1.6 0.1 8	1.2 0.1 6	3.3 0.1 18	72.9 3.5 4,629
Opisthonema oglinum	-	-	-	-	-	2.7 0.3 8	-	0.4 * 2	-	-	-	-	0.2 * 10
All other genera and species of herrings	-	0.4 * 2	-	-	-	-	-	-	-	-	-	-	* * 2
Anchoa spp. (largely mitchilli and hepsetus)	23.1 0.6 127	72.0 3.7 396	155.5 16.6 855	13.8 2.5 90	235.0 16.1 705	121.0 11.2 363	8.3 0.4 66	12.2 0.7 61	1.3 * 8	47.2 1.6 236	30.8 2.5 154	56.0 1.6 308	53.1 2.5 3,369
Synodus foetens	-	-	-	-	-	-	-	-	-	-	-	0.2 * 1	* * 1
Trachinocephalus myops	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	-	-	-	-	16.7 1.1 50	24.7 2.3 74	15.8 0.8 126	19.6 1.1 98	104.0 3.1 624	168.8 5.9 844	0.2 * 1	-	28.6 1.4 1,817
Galeichthys felis	-	-	-	1.4 0.3 9	1.7 0.1 5	-	66.0 3.3 528	15.6 0.9 78	49.0 1.5 294	15.6 0.5 78	-	-	15.6 0.7 992
Ophichthus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Urophycis spp.	3.5 0.1 19	71.6 3.7 394	305.3 32.6 1,679	208.5 37.5 1,355	1.0 0.1 3	0.7 0.1 2	-	-	-	-	-	-	54.3 2.6 3,452
Fistularia tabacaria	-	-	-	-	-	-	-	-	-	-	-	-	-
Hippocampus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Syngnathus spp.	-	0.2 * 1	-	-	-	-	-	-	-	-	-	-	* * 1
Centropristis striatus	-	-	-	-	-	-	-	-	-	0.4 * 2	-	-	* * 2
Centropristis philadelphicus	0.4 * 2	-	-	-	-	-	-	-	-	0.8 * 4	0.2 * 1	1.5 * 8	0.2 * 15
Diplectrum formosum	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobotes surinamensis	-	-	-	-	-	-	-	-	-	-	-	-	-
Pomatomus saltatrix	-	-	-	-	-	2.0 0.2 6	-	-	-	-	0.2 * 1	0.7 * 4	0.2 * 11
Rachycentron canadum	-	-	-	-	-	-	-	-	-	-	-	-	-
Caranx crysos	-	-	-	-	-	-	3.1 0.2 25	30.4 1.7 152	10.0 0.3 60	-	-	-	3.7 0.2 237
Caranx spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroscombrus chrysurus	-	-	-	-	-	6.0 0.6 18	46.5 2.3 372	37.4 2.1 187	4.2 0.1 25	20.0 0.7 100	6.8 0.6 34	-	11.6 0.6 736
Decapterus punctatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Selene vomer	2.9 0.1 16	-	-	-	-	-	1.3 0.1 10	14.4 0.8 72	0.3 * 2	-	2.4 0.2 12	-	1.8 0.1 112
Trachinotus spp.	-	-	-	-	0.3 * 1	-	-	1.6 0.1 8	-	-	-	-	0.1 * 9
Trachurus lathami	-	-	-	-	-	-	-	-	-	-	-	-	-
Vomer setapinnis	1.1 * 6	-	-	-	-	1.0 0.1 3	0.5 * 4	6.4 0.4 32	2.7 0.1 16	18.4 0.6 92	4.4 0.4 22	7.3 0.2 40	3.4 0.2 215
Eucinostomus spp.	-	-	-	-	-	-	-	0.6 * 3	-	-	-	0.4 * 2	0.1 * 5

Table 2.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	-	-	-	-	-	-	-
Orthopristis chrysopterus	5.8 0.2 32	-	-	-	-	-	-	0.8 * 4	1.0 * 6	-	0.4 * 2	-	0.7 * 44
Bairdiella chrysura	19.3 0.5 106	19.3 1.0 106	0.5 * 3	1.4 0.3 9	11.3 0.8 34	-	-	-	1.3 * 8	8.8 0.3 44	26.2 2.1 131	57.8 1.6 318	12.0 0.6 759
Cynoscion nebulosus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cynoscion nothus	27.6 0.7 152	5.6 0.3 31	3.1 0.3 17	5.5 1.0 36	32.0 2.2 96	6.0 0.6 18	43.4 2.2 347	44.4 2.5 222	22.0 0.7 132	32.4 1.1 162	68.2 5.5 341	12.0 0.3 66	25.5 1.2 1,620
Cynoscion regalis	698.7 18.9 3,843	31.5 1.6 173	1.5 0.2 8	9.2 1.7 60	37.0 2.5 111	50.0 4.6 150	78.6 4.0 629	40.6 2.2 203	127.0 3.8 762	178.0 6.2 890	186.4 15.0 932	221.5 6.2 1,218	141.4 6.8 8,979
Equetus acuminatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Equetus lanceolatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Larimus fasciatus	46.0 1.2 253	3.5 0.2 19	9.8 1.1 54	3.7 0.7 24	1.7 0.1 5	12.0 1.1 36	46.3 2.3 370	33.6 1.9 168	2.0 0.1 12	20.8 0.7 104	42.8 3.5 214	37.1 1.0 204	23.0 1.1 1,463
Leiostomus xanthurus	1,457.1 39.5 8,015	1,096.0 57.0 6,028	6.0 0.6 33	10.5 1.9 68	9.0 0.6 27	47.0 4.4 141	138.5 7.0 1,108	53.6 3.0 268	9.3 0.3 56	4.8 0.2 24	24.0 1.9 120	2,496.0 69.9 13,728	466.4 22.3 29,616
Menticirrhus spp. (largely americanus)	120.2 3.3 661	129.8 6.8 714	155.5 16.6 855	45.4 8.2 295	22.3 1.5 67	10.7 1.0 32	111.3 5.6 890	52.0 2.9 260	163.3 4.9 980	129.6 4.5 648	68.4 5.5 342	119.6 3.4 658	100.8 4.8 6,402
Micropogon undulatus	55.4 1.5 305	1.6 0.1 9	1.1 0.2 6	2.5 0.4 16	11.0 0.8 33	17.0 1.6 51	288.3 14.5 2,306	313.2 17.3 1,566	202.3 6.1 1,214	457.6 15.9 2,288	201.6 16.3 1,008	161.1 4.5 886	152.6 7.3 9,688
Pogonias cromis	-	-	-	0.3 0.1 2	-	-	-	-	-	-	-	0.9 * 5	0.1 * 7
Stellifer lanceolatus	782.5 21.2 4,304	145.1 7.5 798	89.5 10.0 492	154.8 27.9 1,006	777.3 53.3 2,332	540.7 50.0 1,622	1,052.6 52.9 8,420	1,047.2 57.8 5,236	2,481.3 74.3 14,888	1,638.4 56.8 8,192	512.0 41.3 2,560	277.3 7.8 1,525	809.1 38.8 51,375
Mullus auratus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagodon rhomboides	-	-	-	-	-	-	0.3 * 2	3.0 0.2 15	-	1.6 0.1 8	-	1.5 * 8	0.5 * 33
Stenotomus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaetodipterus faber	-	-	-	-	-	-	1.4 * 11	19.2 1.1 96	14.0 0.4 84	4.0 0.1 20	0.2 * 1	-	3.3 0.2 212
Kyrichthys spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichiurus lepturus	10.5 0.3 58	28.4 1.5 156	1.5 0.2 8	4.2 0.8 27	13.0 0.9 39	15.7 1.5 47	19.8 1.0 158	25.2 1.4 126	4.0 0.1 24	14.4 0.5 72	2.0 0.2 10	1.5 * 8	11.5 0.6 733
Scomberomorus maculatus	-	-	-	-	-	-	-	-	0.7 * 4	0.8 * 4	-	-	0.1 * 8
Gobionellus oceanicus	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Scorpaena spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Prionotus spp.	9.8 0.3 54	0.4 * 2	2.2 0.2 12	0.6 0.1 4	-	-	4.1 0.2 32	2.2 0.1 11	2.0 0.1 12	6.4 0.2 32	0.8 0.1 4	0.7 * 4	2.7 0.1 167
Astroscopus y-graecum	-	-	-	-	0.7 0.1 2	-	-	-	-	-	-	-	* * 2
Hypsoblennius spp.	-	-	0.5 0.1 3	-	-	-	-	-	-	-	0.2 * 1	-	0.1 * 4
Rissola marginata	-	-	-	-	-	-	-	-	-	-	0.2 * 1	-	* * 1
Peprilus alepidotus	1.5 * 8	3.6 0.2 20	-	-	3.0 0.2 9	0.7 0.1 2	0.5 * 4	1.4 0.1 7	1.0 * 6	-	1.2 0.1 6	11.6 0.3 64	2.0 0.1 126
Poronotus triacanthus	2.7 0.1 15	6.2 0.3 34	30.5 3.3 168	25.1 4.5 163	128.7 8.8 386	108.7 10.1 326	5.0 0.3 40	0.4 * 2	2.0 0.1 12	0.8 * 4	4.8 0.4 24	8.4 0.2 46	19.2 0.9 1,220
Sphyraena spp. (largely guachancho)	-	-	-	-	-	-	-	-	-	0.4 * 2	0.4 * 2	-	0.1 * 4
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	0.2 * 1	-	* * 1
Polydactylus octonemus	-	-	-	-	-	-	-	-	-	-	-	-	-
Citharichthys spp. (largely spilopterus)	0.4 * 2	-	0.2 * 1	-	-	-	4.8 0.2 38	-	2.3 0.1 14	-	-	-	0.9 * 55
Etropus crossotus	16.2 0.4 89	10.9 0.6 60	27.1 2.9 149	2.2 0.4 14	-	-	1.0 0.1 8	7.8 0.4 39	64.3 1.9 386	14.0 0.5 70	11.6 0.9 58	18.2 0.5 100	15.3 0.7 973
Paralichthys dentatus	0.2 * 1	0.4 * 2	0.7 0.1 4	0.3 0.1 2	-	-	3.1 0.2 25	4.0 0.2 20	1.0 * 6	6.8 0.2 34	0.6 0.1 3	-	1.5 0.1 97
Paralichthys lethostigma	-	-	-	-	-	-	-	-	-	-	-	-	-
Scophthalmus aquosus	-	1.1 0.1 6	14.4 1.5 79	4.6 0.8 30	9.3 0.6 28	3.3 0.3 10	2.3 0.1 18	-	-	-	-	-	2.7 0.1 171
Syacium spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Bothus ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinectes maculatus	15.1 0.4 83	1.6 0.1 9	4.5 0.5 25	14.6 2.6 95	31.7 2.2 95	5.3 0.5 16	25.5 1.3 204	11.4 0.6 57	55.0 1.7 330	39.2 1.4 196	9.8 0.8 49	13.5 0.4 74	19.4 0.9 1,233
Symphurus spp. (largely plagiusa)	34.4 0.9 189	14.7 0.8 81	44.4 4.7 244	15.5 2.8 101	-	0.7 0.1 2	2.5 0.1 20	4.6 0.3 23	3.3 0.1 20	37.2 1.3 186	22.2 1.8 111	50.9 1.4 280	19.8 0.9 1,257
Echeneis naucrates	-	-	-	-	-	-	-	-	-	-	-	-	-
Balistes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alutera schoepfii	-	-	-	-	-	-	-	-	-	-	-	-	-
Stephanolepis spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthostracion spp. (largely quadricornis)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagocephalus laevigatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Sphaeroides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chilomycterus schoepfi	5.8 0.2 32	-	-	2.2 0.4 14	-	-	1.0 0.1 8	0.8 * 4	1.7 0.1 10	0.8 * 4	0.8 0.1 4	2.9 0.1 16	1.4 0.1 92
Opsanus tau	-	-	-	-	-	-	-	-	-	-	-	-	-
Porichthys porosissimus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ogcocephalus spp. (largely vespertilio)	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3,693.5 99.9 20,315	1,924.6 100.0 10,585	936.5 100.6 5,150	555.9 100.3 3,612	1,457.7 99.9 4,373	1,081.0 100.4 3,243	1,988.9 99.2 15,905	1,813.0 100.2 9,065	3,338.3 100.1 20,031	2,882.6 99.9 14,413	1,240.6 100.1 6,203	3,571.1 99.7 19,639	2,085.9 99.8 132,534

Table 3.--Fish taken by trawling, Georgia Outside, M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.				*		0.3	0.1	*					*
	-	-	-	*	-	0.1	*	*	-	-	-	-	*
				1		6	2	1					10
Scoliodon terraenovae					1.0	1.2	3.4	0.6	0.1	1.3	0.1		0.7
	-	-	-	-	0.1	0.2	0.3	0.1	*	0.1	*	-	0.1
					23	22	102	20	4	35	1		207
Sphyrna tiburo			0.1	0.3	0.8	1.1	0.3	0.2	0.9	0.1	3.1	0.3	0.5
	-	-	*	0.1	0.1	0.2	*	*	*	*	0.1	*	*
			2	8	18	19	8	6	25	4	58	8	156
Sphyrna zygaena			*			0.4	0.8	0.5	0.5	0.2			0.2
	-	-	*	-	-	0.1	0.1	*	*	*	-	-	*
			1			8	24	16	15	5			69
Pristis pectinatus									*				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									1				1
Rhinobatos lentiginosus					0.1	0.1		0.1	0.1				*
	-	-	-	-	*	*	-	*	*	-	-	-	*
					1	2		4	2				9
Torpedo nobiliana	-	-	-	-	-	-	-	-	-	-	-	-	-
Raja eglanteria	4.4	2.3	1.2	2.7	0.9		0.1	0.1	0.2	4.8	5.0	13.3	2.8
	0.4	0.2	0.2	0.4	0.1	-	*	*	*	0.3	0.2	0.6	0.2
	87	88	32	68	19		2	3	5	133	95	353	885
Dasyatis americana	0.4	0.2	0.3	3.6	0.9	0.2	5.3	1.3	1.3	1.2	0.8	0.7	1.4
	*	*	0.1	0.5	0.1	*	0.5	0.1	*	0.1	*	*	0.1
	8	8	8	91	19	3	158	43	38	33	15	19	443
Dasyatis centroura				0.1									*
	-	-	-	*	-	-	-	-	-	-	-	-	*
				2									2
Dasyatis sabina	1.1	1.4	0.8	1.3	0.5	0.5	0.6	2.8	3.4	2.3	1.7	23.2	3.4
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	1.0	0.2
	21	55	20	34	10	9	18	88	98	64	33	616	1066
Gymnura micrura		0.1		0.5	0.6	0.2	2.1	*	0.7	0.5	0.2	0.3	0.4
	-	*	-	0.1	0.1	*	0.2	*	*	*	*	*	*
		2		13	14	4	62	1	20	13	4	8	141
Aetobatus narinari		0.2		*			*					0.1	*
	-	*	-	*	-	-	*	-	-	-	-	*	*
		8		1			1					2	12
Rhinoptera bonasus		0.7	4.3	0.2	1.5		0.4	0.3	0.6	0.3		0.2	0.7
	-	0.1	0.7	*	0.2	-	*	*	*	*	-	*	0.1
		29	112	4	32		12	8	18	9		4	228
Acipenser oxyrhynchus		0.1										0.1	*
	-	*	-	-	-	-	-	-	-	-	-	*	*
		2										3	5
Lepisosteus osseus								0.1	*	*			*
	-	-	-	-	-	-	-	*	*	*	-	-	*
								2	1	1			4
Brevoortia spp. (tyrannus and smithi)	107.9	224.6	52.4	2.1	28.1	15.9	3.7	1.1	1.1	0.3	1.1	13.7	43.6
	8.7	22.0	8.9	0.3	3.1	2.3	0.3	0.1	*	*	0.1	0.6	3.1
	2,157	8,703	1,362	52	619	287	112	35	31	8	21	362	13,749
Opisthonema oglinum				0.2	0.2	5.1	0.3	0.1		0.1		0.1	0.4
	-	-	-	*	*	0.7	*	*	-	*	-	*	*
				4	4	91	10	4		2		2	117
All other genera and species of herrings	0.1	0.3	0.2		1.3	0.2	*	*				0.1	0.2
	*	*	*	-	0.1	*	*	*	-	-	-	*	*
	1	12	6		28	4	1	1				2	55
Anchoa spp. (largely mitchilli and hepsetus)	33.2	29.5	40.3	29.2	13.5	22.4	5.1	5.1	23.7	39.0	67.7	36.4	27.4
	2.7	2.9	6.8	4.3	1.5	3.2	0.5	0.4	0.9	2.0	3.2	1.6	2.0
	664	1,144	1,047	737	297	403	153	163	692	1,073	1,287	965	8,625
Synodus foetens		*		1.1	2.1	3.0	1.7	2.8	1.3	4.2	10.0	2.3	2.1
	-	*	-	0.2	0.2	0.4	0.2	0.2	*	0.2	0.5	0.1	0.2
		1		28	46	54	51	90	38	115	190	60	673
Trachinocephalus myops									0.2				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									6				6

Table 3.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	-	-	-	5.7 0.8 145	42.0 4.6 923	2.0 0.3 36	15.0 1.4 450	26.3 2.0 840	142.7 5.4 4,174	75.1 3.8 2,064	90.9 4.2 1,728	- - -	32.9 2.4 10,360
Galeichthys felis	2.0 0.2 40	- - -	0.2 * 6	16.2 2.4 408	7.4 0.8 162	6.4 0.9 115	14.0 1.3 420	42.0 3.2 1,345	29.0 1.1 848	22.0 1.1 606	22.5 1.1 428	3.5 0.2 94	14.2 1.0 4,472
Ophichthus spp.	- - -	* * 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	* * 1	* * 2
Urophycis spp.	5.7 0.5 113	48.4 4.8 1,876	73.8 12.5 1,918	20.7 3.2 522	1.3 0.1 29	- - -	- - -	- - -	- - -	- - -	- - -	0.1 * 2	14.1 1.0 4,460
Fistularia tabacaria	-	-	-	-	-	-	-	-	0.1 * 2	-	-	-	* * 2
Hippocampus spp.	* * 1	- - -	* * 1	- - -	- - -	- - -	* * 1	- - -	- - -	- - -	- - -	- - -	* * 3
Syngnathus spp.	- - -	* * 1	* * 1	- - -	- - -	- - -	- - -	0.2 * 5	- - -	- - -	- - -	- - -	* * 7
Centropristis striatus	- - -	0.4 * 15	0.4 0.1 10	0.2 * 5	0.4 * 8	- - -	* * 1	0.4 * 13	0.1 * 4	0.1 * 2	0.8 * 16	0.3 * 7	0.3 * 81
Centropristis philadelphicus	0.7 0.1 13	0.2 * 8	0.1 * 2	- - -	0.1 * 2	- - -	* * 1	* * 1	0.5 * 16	3.5 0.2 95	8.2 0.4 156	1.7 0.1 44	1.1 0.1 338
Diplectrum formosum	-	-	-	-	1.3 0.1 28	0.2 * 4	0.7 0.1 20	1.5 0.1 48	8.9 0.3 260	-	0.1 * 2	-	1.2 0.1 362
Lobotes surinamensis	-	-	-	-	0.1 * 1	0.1 * 1	-	-	-	-	-	-	* * 2
Pomatomus saltatrix	0.6 * 11	0.1 * 5	1.0 0.2 26	0.2 * 4	0.4 * 8	0.5 0.1 9	-	-	-	* * 1	3.8 0.2 72	3.0 0.1 80	0.7 0.1 216
Rachycentron canadum	-	-	-	-	-	-	-	-	-	-	-	-	-
Caranx crysos	-	-	0.1 * 2	-	0.1 * 2	0.5 0.1 9	0.8 0.1 23	0.2 * 5	2.1 0.1 62	1.3 0.1 36	-	0.2 * 4	0.5 * 143
Caranx spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroscombrus chrysurus	120.1 9.7 2,401	40.9 4.0 1,585	13.0 2.2 337	0.9 0.1 22	23.1 2.5 509	106.3 15.3 1,913	119.0 10.7 3,570	171.9 13.0 5,502	306.6 11.5 8,967	58.5 3.0 1,609	98.9 4.6 1,880	36.2 1.6 960	93.1 6.7 29,255
Decapterus punctatus	-	-	-	-	-	-	* * 1	-	-	-	-	-	* * 1
Selene vomer	-	0.1 * 3	-	-	-	1.5 0.2 27	5.3 0.5 160	4.5 0.3 145	1.0 * 30	2.9 0.2 79	3.1 0.1 59	0.3 * 8	1.6 0.1 511
Trachinotus spp.	-	-	-	-	0.1 * 2	-	0.6 0.1 17	2.9 0.2 94	0.1 * 2	0.3 * 9	0.1 * 1	-	0.4 * 125
Trachurus lathami	-	-	-	-	-	-	-	-	-	-	-	-	-
Vomer setapinnis	1.1 0.1 22	0.5 0.1 18	0.9 0.2 23	0.9 0.1 23	2.5 0.3 56	1.1 0.2 19	0.2 * 6	6.7 0.5 215	11.9 0.4 347	9.5 0.5 262	90.1 4.2 1,712	90.3 4.0 2,392	16.2 1.2 5,095
Eucinostomus spp.	-	-	-	-	-	-	-	0.1 * 3	0.8 * 26	0.4 * 11	2.8 0.1 54	* * 1	0.3 * 95

Table 3.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	0.4 * 12	-	-	-	-	-	* * 12
Orthopristis chrysopterus	1.0 0.1 20	-	-	-	-	0.1 * 2	0.5 0.1 15	0.3 * 10	8.8 0.3 256	1.1 0.1 30	1.2 0.1 22	* * 1	1.1 0.1 356
Bairdiella chrysura	2.6 0.2 51	4.6 0.5 180	1.5 0.3 40	5.9 0.9 148	4.1 0.5 90	2.4 0.3 43	4.9 0.4 146	3.8 0.3 122	3.8 0.1 111	3.1 0.2 86	7.6 0.4 145	13.6 0.6 361	4.8 0.4 1,523
Cynoscion nebulosus	0.2 * 4	0.1 * 5	-	-	-	0.1 * 1	0.7 0.1 21	0.2 * 6	0.3 * 10	-	0.1 * 1	0.2 * 6	0.2 * 54
Cynoscion nothus	0.7 0.1 13	* * 1	* * 1	8.1 1.2 204	3.6 0.4 79	7.4 1.1 133	14.0 1.3 421	79.7 6.0 2,557	134.2 5.0 3,926	1.0 0.1 27	13.5 0.6 257	11.9 0.5 315	25.2 1.8 7,934
Cynoscion regalis	59.5 4.8 1,189	42.5 4.2 1,645	6.5 1.1 170	44.3 6.5 1,119	25.2 2.8 555	7.8 1.1 140	48.3 4.4 1,448	53.5 4.0 1,712	70.4 2.6 2,060	48.7 2.5 1,340	56.7 2.6 1,077	120.8 5.4 3,202	49.8 3.6 15,657
Equetus acuminatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Equetus lanceolatus	-	-	-	-	-	-	0.1 * 4	-	-	-	-	-	* * 4
Larimus fasciatus	6.9 0.6 138	2.6 0.3 102	3.3 0.6 87	8.8 1.3 221	19.9 2.2 437	12.4 1.8 224	13.1 1.2 392	46.1 3.5 1,476	80.4 3.0 2,353	29.2 1.5 802	77.0 3.6 1,463	9.5 0.4 252	25.3 1.8 7,947
Leiostomus xanthurus	88.5 7.1 1,769	262.7 25.8 10,178	157.4 26.6 4,092	20.2 2.9 509	205.3 22.5 4,516	14.6 2.1 263	39.9 3.6 1,198	57.9 4.4 1,852	45.7 1.6 1,279	16.9 0.9 464	38.2 1.8 726	287.7 12.7 7,623	109.7 7.8 34,469
Menticirrhus spp. (largely americanus)	202.8 16.3 4,056	109.5 10.8 4,244	28.8 4.9 750	85.7 12.5 2,166	22.1 2.4 486	17.5 2.5 315	25.5 2.3 766	53.8 4.1 1,720	90.3 3.4 2,642	180.7 9.3 4,969	230.6 10.7 4,382	175.7 7.8 4,656	99.1 7.1 31,152
Micropogon undulatus	93.1 7.5 1,862	3.2 0.3 125	2.7 0.5 71	1.3 0.2 32	21.8 2.4 479	91.7 13.2 1,651	135.4 12.2 4,062	258.7 19.5 8,277	676.6 25.4 19,790	202.9 10.4 5,581	81.2 3.8 1,542	27.0 1.2 716	140.6 10.1 44,188
Pogonias cromis	-	-	* * 1	-	-	-	-	-	-	* * 1	0.1 * 2	0.1 * 2	* * 6
Stellifer lanceolatus	357.1 28.7 7,141	138.4 13.6 5,362	119.6 20.2 3,110	322.6 47.1 8,146	297.4 32.6 6,543	277.6 40.1 4,997	501.4 45.2 15,042	397.5 30.0 12,719	805.5 30.2 23,561	1,090.4 55.8 29,987	1,045.6 48.7 19,867	1,117.8 49.5 29,623	528.6 38.0 166,098
Mullus auratus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagodon rhomboides	0.1 * 1	0.8 0.1 30	-	-	34.2 3.8 752	3.6 0.5 64	15.4 1.4 462	-	-	0.9 0.1 26	1.8 0.1 35	0.5 * 13	4.4 0.3 1,383
Stenotomus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaetodipterus faber	-	-	-	0.5 0.1 13	* * 10	0.8 0.1 14	0.7 * 21	19.8 1.5 634	27.2 1.0 797	10.6 0.5 292	1.7 0.1 32	* * 1	5.8 0.4 1,814
Xyrichthys spp.	-	-	-	1.0 0.1 24	5.6 0.6 124	2.1 0.3 37	2.5 0.2 76	3.4 0.3 109	7.8 0.3 228	-	0.1 * 2	-	1.9 0.1 600
Trichiurus lepturus	13.5 1.1 269	16.2 1.6 626	25.1 4.2 652	19.2 2.8 485	35.5 3.9 780	26.8 3.9 483	56.3 5.1 1,688	39.2 3.0 1,254	16.0 0.6 467	1.6 0.1 44	23.6 1.1 449	59.4 2.6 1,575	27.8 2.0 8,772
Scomberomorus maculatus	-	0.1 * 2	-	-	* * 1	-	0.1 * 2	0.2 * 6	0.1 * 4	0.3 * 8	1.1 0.1 20	-	0.1 0.1 43
Gobionellus oceanicus	-	-	-	-	* * 1	-	* * 1	-	-	-	-	-	* * 2

Table 3.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Scorpaena spp.	-	-	-	-	-	-	-	-	0.1 * 2	-	0.1 * 2	-	* * 4
Prionotus spp.	4.0 0.3 79	3.0 0.3 116	0.9 0.1 24	8.1 1.2 205	3.0 0.4 67	24.7 3.5 444	7.9 0.7 237	6.8 0.5 218	6.4 0.2 186	9.9 0.6 273	13.9 0.6 264	11.9 0.6 315	7.8 0.6 2,428
Astroscopus y-graecum	1.0 0.1 20	0.2 * 6	-	0.2 * 5	0.2 * 4	0.5 0.1 9	-	-	0.2 * 7	-	0.2 * 4	0.7 * 19	0.2 * 74
Hypsoblennius spp.	-	-	* * 1	0.1 * 2	0.1 * 1	-	-	-	-	-	-	-	* * 4
Rissola marginata	0.1 * 1	-	-	* * 1	-	0.1 * 1	-	-	-	-	0.1 * 2	0.2 * 4	* * 9
Peprilus alepidotus	10.1 0.8 201	5.7 0.6 221	7.9 1.3 205	12.9 1.9 326	16.5 1.8 364	14.8 2.1 266	5.4 0.5 163	6.8 0.5 218	12.1 0.5 354	11.6 0.6 320	8.3 0.4 157	34.5 1.5 913	11.8 0.9 3,708
Poronotus triacanthus	13.2 1.1 263	16.4 1.6 636	21.3 3.6 554	21.4 3.1 540	37.5 4.1 825	4.8 0.7 86	2.6 0.2 79	2.4 0.2 77	39.7 1.5 1,161	6.4 0.3 176	14.7 0.7 279	21.4 1.0 567	16.6 1.2 5,243
Sphyraena spp. (largely guachancho)	0.1 * 1	-	-	-	-	-	-	-	* * 1	-	-	-	* * 2
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	0.5 * 9	* * 1	* * 10
Polydactylus octonemus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ancylopsetta quadrocellata	1.7 0.1 34	0.9 0.1 33	* * 1	0.7 0.1 18	2.7 0.3 60	4.0 0.6 72	1.0 0.1 29	0.9 0.1 29	0.6 * 17	0.2 * 6	0.6 * 12	0.2 * 5	1.0 0.1 316
Citharichthys spp. (largely spilopterus)	1.0 0.1 20	0.4 * 14	0.1 * 3	* * 1	1.7 0.2 37	1.8 0.3 33	4.0 0.4 119	1.6 0.1 50	2.3 0.1 68	1.2 0.1 33	2.7 0.1 52	4.9 0.2 131	1.8 0.1 561
Etropus crossotus	87.2 7.0 1,744	44.8 4.4 1,735	16.7 2.8 435	5.1 0.8 129	4.6 0.5 102	1.0 0.1 18	8.6 0.8 258	3.6 0.3 114	25.3 0.9 739	42.7 2.2 1,173	60.4 2.8 1,148	67.9 3.0 1,799	29.9 2.2 9,394
Paralichthys dentatus	1.5 0.1 30	1.2 0.1 46	0.5 0.1 14	0.3 0.1 8	0.5 0.1 11	1.3 0.2 23	4.7 0.4 140	1.4 0.1 44	1.1 * 31	1.2 0.1 33	2.4 0.1 46	4.3 0.2 113	1.7 0.1 539
Paralichthys lethostigma	-	0.2 * 8	-	-	-	-	-	-	-	0.1 * 2	0.3 * 6	0.2 * 5	0.1 * 21
Scophthalmus aquosus	2.1 0.2 41	3.9 0.4 150	5.7 1.0 149	12.9 1.9 325	25.8 2.8 567	2.2 0.3 40	2.9 0.3 87	0.3 * 10	0.6 * 18	3.7 0.2 102	5.6 0.3 107	2.2 0.1 58	5.3 0.4 1,654
Syacium spp.	-	-	-	-	-	0.3 0.1 6	-	0.6 * 19	1.2 * 36	-	-	-	0.2 * 61
Bothus ocellatus	-	-	-	-	-	0.1 * 2	-	0.1 * 4	-	-	-	-	* * 6
Trinectes maculatus	9.5 0.8 189	3.4 0.3 131	1.5 0.3 39	7.6 1.1 191	2.9 0.3 63	2.3 0.3 42	26.7 2.4 802	10.4 0.8 333	19.6 0.7 572	37.8 1.9 1,040	28.1 1.3 534	24.8 1.1 658	14.6 1.1 4,594
Symphurus spp. (largely plagiusa)	11.0 0.9 220	8.6 0.9 335	2.9 0.5 76	10.9 1.6 274	6.0 0.7 132	0.4 0.1 8	5.1 0.5 153	0.4 * 14	5.9 0.2 173	20.0 1.0 550	14.8 0.7 282	34.3 1.5 909	9.9 0.7 3,126
Echeneis naucrates	-	-	-	-	-	-	* * 1	-	* * 1	-	-	-	* * 2
Balistes spp.	-	-	-	-	* * 1	-	* * 1	-	-	-	-	-	* * 2

Table 3.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alutera schoepfii	-	-	-	0.1 * 2	0.1 * 3	0.2 * 3	0.1 * 4	-	0.3 * 8	-	-	-	0.1 * 20
Stephanolepis spp.	-	-	-	0.2 * 5	4.8 0.5 105	0.3 * 5	0.9 0.1 26	2.8 0.2 88	45.9 1.7 1,342	-	-	-	5.0 0.4 1,571
Acanthostracion spp. (largely *quadricornis*)	-	-	-	-	* * 1	-	-	-	-	-	-	-	* * 1
Lagocephalus laevigatus	-	-	-	-	* * 1	-	0.1 * 3	* * 1	-	-	-	-	* * 5
Sphaeroides spp.	-	-	* * 1	-	* * 1	-	* * 1	* * 1	-	-	0.1 * 2	0.1 * 2	* * 8
Chilomycterus schoepfi	0.4 * 7	0.1 * 2	0.2 * 5	0.5 0.1 12	0.4 * 8	0.2 * 4	0.4 * 11	0.4 * 12	0.6 * 18	2.5 0.1 68	1.9 0.1 36	0.8 * 20	0.6 0.1 203
Opsanus tau	-	-	-	0.4 0.1 11	-	-	-	-	-	-	-	-	* * 11
Porichthys porosissimus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ogcocephalus spp. (largely *vespertilio*)	-	-	-	-	-	-	-	-	0.5 * 15	0.4 * 11	0.8 * 16	0.1 * 2	0.1 * 44
Total	1,246.2 100.5 24,902	1,019.5 100.1 39,497	591.7 100.1 15,397	685.1 100.3 17,294	911.8 99.9 20,066	693.1 99.8 12,474	1,109.1 100.3 33,277	1,324.4 99.8 42,387	2,667.4 99.1 77,965	1,953.0 100.3 53,713	2,146.6 99.9 40,792	2,259.1 99.8 59,864	1,391.5 100.2 437,628

Table 4.--Fish taken by trawling, Georgia Inside, M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.	-	*	-	*	-	0.2	-	-	*	0.1	-	-	*
		*		*		*			*	*			*
		1		2		9			2	2			16
Scoliodon terraenovae	0.1			0.1	0.5	5.0	2.7	0.3	*	0.1		0.1	0.8
	*	-	-	*	*	0.4	0.1	*	*	*	-	*	0.1
	2			3	24	207	84	15	1	2		2	340
Sphyrna tiburo	0.3	0.2	0.1	1.3	0.7	1.5	0.5	0.3	1.2	1.2	0.8		0.7
	*	*	*	0.1	0.1	0.1	*	*	0.1	0.1	*	-	0.1
	6	4	2	75	35	61	14	12	65	39	12		325
Sphyrna zygaena	-	-	-	-	0.1	1.1	2.3	0.7	0.2	0.1			0.4
					*	0.1	0.1	*	*	*	-	-	*
					4	46	70	34	11	2			167
Pristis pectinatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhinobatos lentiginosus	-	-	-	-	-	-	-	-	-	-	-	-	-
Torpedo nobiliana	-	-	-	-	-	-	-	-	-	-	-	-	-
Raja eglanteria	5.6	0.5	0.5	0.3	0.2					1.5	4.1	9.9	1.1
	0.4	0.1	0.1	*	*	-	-	-	-	0.1	0.2	0.4	0.1
	111	13	23	17	10					48	63	190	475
Dasyatis americana	-	-	*	1.0	0.4	0.6	0.8	0.4	0.1	0.1	1.5	0.5	0.4
			*	0.1	*	*	*	*	*	*	0.1	*	*
			1	56	21	24	25	17	7	4	23	10	188
Dasyatis centroura	-	-	-	-	-	-	-	-	-	-	-	-	-
Dasyatis sabina	3.9	0.4	0.7	5.1	7.6	6.5	3.4	0.8	1.8	4.5	9.6	9.4	4.4
	0.3	0.1	0.1	0.4	0.7	0.5	0.2	0.2	0.1	0.3	0.4	0.4	0.3
	77	10	29	297	378	270	105	175	93	147	146	181	1,908
Gymnura micrura	-	-	-	0.6	2.2	1.4	2.0	1.1	0.7	0.5			0.8
				*	0.2	0.1	0.1	0.1	*	*	-	-	0.1
				35	108	59	61	50	37	15			365
Aetobatus narinari	-	*	-	*	-	-	-	-	-	-	-	-	*
		*		*									*
		1		2									3
Rhinoptera bonasus	-	-	*	0.2	0.8	0.5	0.8	*	0.2	0.1			0.3
			*	*	0.1	*	*	*	*	*	-	-	*
			2	13	40	19	25	2	11	2			114
Acipenser oxyrhynchus	-	-	-	-	-	-	-	-	-	-	-	0.3	*
												*	*
												5	5
Lepisosteus osseus	-	-	*	0.4	0.4	0.2	0.3	0.2	0.1	0.2	0.3	0.3	0.2
			*	*	*	*	*	*	*	*	*	*	*
			2	25	18	9	9	9	7	5	4	5	93
Brevoortia spp. (tyrannus and smithi)	49.9	66.1	31.4	10.3	9.1	11.1	7.2	2.0	0.3	1.3	2.6	4.3	13.9
	3.3	13.3	3.0	0.7	0.8	0.8	0.3	0.1	*	0.1	0.1	0.2	0.9
	986	1,735	1,333	598	455	461	223	94	15	44	39	83	6,066
Opisthonema oglinum	28.4	4.3	*	*	*		0.3	*		0.1		1.2	1.6
	1.9	0.9	*	*	*	-	*	*	-	*	-	0.1	0.1
	560	112	1	2	1		8	1		2		24	711
All other genera and species of herrings	1.9	1.4	0.3		0.1		*	*	0.1				0.2
	0.1	0.3	*	-	*	-	*	*	*	-	-	-	*
	37	38	14		4		1	1	6				101
Anchoa spp. (largely mitchilli and hepsetus)	48.2	12.9	34.9	72.5	37.6	31.3	9.5	6.5	16.3	96.5	176.6	72.9	43.4
	3.2	2.6	3.4	5.0	3.4	2.4	0.4	0.4	1.2	5.9	6.5	2.7	2.9
	951	339	1,484	4,204	1,871	1,299	295	299	865	3,184	2,693	1,404	18,888
Synodus foetens	0.4					0.1	0.3		*	0.1	0.3	0.1	0.1
	*	-	-	-	-	*	*	-	*	*	*	*	*
	8					6	8		1	2	4	1	30
Trachinocephalus myops	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	-	-	*	5.8	23.2	46.2	26.7	103.4	109.2	52.2	7.4	0.3	38.2
			*	0.4	2.1	3.5	1.2	5.6	7.8	3.2	0.3	*	2.5
			3	335	1,156	1,917	828	4,756	5,789	1,724	113	6	16,627
Galeichthys felis	0.8	*	0.4	52.0	87.5	114.4	90.5	152.7	40.2	17.2	6.9		56.9
	0.1	*	*	3.6	8.0	8.6	4.2	8.3	2.9	1.1	0.3	-	3.8
	16	1	15	3,017	4,351	4,749	2,805	7,024	2,129	568	105		24,780
Ophichthus spp.	-	-	-	-	-	-	-	*	*	-	-	-	*
								*	*				*
								1	1				2
Urophycis spp.	2.5	92.1	167.2	27.1	1.5								25.8
	0.2	18.5	16.2	1.9	0.1	-	-	-	-	-	-	-	1.7
	49	2,417	7,108	1,573	76								11,223
Fistularia tabacaria	-	-	-	-	-	-	-	-	-	-	-	-	-
Hippocampus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Syngnathus spp.	0.1	0.1										0.1	*
	*	*	-	-	-	-	-	-	-	-	-	*	*
	2	3										1	6
Centropristis striatus	2.9	0.3	0.1	1.0	0.4	0.4			0.1	0.6	0.3	0.2	0.5
	0.2	0.1	*	0.1	*	*	-	-	*	*	*	*	*
	57	7	4	58	22	17			7	19	4	4	199
Centropristis philadelphicus	0.3	0.4	0.1	0.1	*			*	0.5	2.8	2.8	1.4	0.5
	*	0.1	*	*	*	-	-	*	*	0.2	0.1	0.1	*
	5	11	6	8	2			2	29	92	42	27	224
Diplectrum formosum	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobotes surinamensis	-	-	-	*	*	*	0.1	*					*
				*	*	*	*	*	-	-	-	-	*
				1	1	1	3	1					7
Pomatomus saltatrix	4.5	4.9	0.5	0.3	1.9	0.3	0.2	*		0.2	0.7	2.5	1.0
	0.3	1.0	0.1	*	0.2	*	*	*	-	*	*	0.1	0.1
	88	129	23	15	95	11	5	2		6	11	49	434
Rachycentron canadum	-	-	-	-	-	-	-	-	-	*	-	-	*
										*			*
										1			1
Caranx crysos	-	-	-	*		0.1	0.2	1.1	0.4	0.6			0.2
				*	-	*	*	0.1	*	*	-	-	*
				1		4	6	49	20	20			100
Caranx spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroscombrus chrysurus	13.2	7.9	3.1	0.2	15.4	17.1	16.1	30.3	18.1	18.7	16.9	26.0	14.5
	0.9	1.6	0.3	*	1.4	1.3	0.7	1.6	1.3	1.1	0.6	1.0	1.0
	260	207	130	14	767	711	499	1,396	960	618	257	500	6,319
Decapterus punctatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Selene vomer	0.7	0.5		*	*	3.1	5.4	2.6	3.8	14.9	4.1	0.8	2.8
	0.1	0.1	-	*	*	0.2	0.3	0.1	0.3	0.9	0.2	*	0.2
	14	13		1	1	129	167	119	204	491	63	16	1,218
Trachinotus spp.	-	-	-	-	*	-	*	0.1					*
					*		*	*	-	-	-	-	*
					1		1	4					6
Trachurus lathami	-	-	-	-	-	-	-	-	-	-	-	-	-
Vomer setapinnis	-	-	*		1.9	*	0.3	1.5	3.9	5.1	2.1	0.2	1.4
			*	-	0.2	*	*	0.1	0.3	0.3	0.1	*	0.1
			1		95	1	8	71	209	169	32	3	589
Eucinostomus spp.	-	-	-	-	-	-	-	*	0.1	0.1	0.2	0.1	*
								*	*	*	*	*	*
								2	6	2	3	2	15

Table 4.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	-	-	-	-	-	-	-
Orthopristis chrysopterus	-	-	-	* * 1	-	-	3.3 0.2 103	0.6 * 26	0.5 * 27	-	-	-	0.4 * 157
Bairdiella chrysura	18.0 1.2 355	2.7 0.5 71	6.5 0.6 276	23.4 1.6 1,359	12.2 1.1 608	6.1 0.5 254	7.9 0.4 246	4.0 0.2 184	7.6 0.5 403	17.2 1.1 569	5.8 0.2 89	17.9 0.7 345	10.9 0.7 4,759
Cynoscion nebulosus	0.7 * 13	0.1 * 3	0.1 * 2	0.2 * 10	0.7 0.1 35	0.9 0.1 37	1.4 0.1 42	0.6 * 26	0.4 * 20	0.2 * 8	0.6 * 9	1.0 * 19	0.5 * 224
Cynoscion nothus	0.2 * 3	-	-	0.3 * 15	5.6 0.5 280	1.7 * 69	0.6 * 20	0.6 * 29	-	0.5 * 18	1.4 0.1 22	-	1.0 0.1 456
Cynoscion regalis	49.3 3.3 974	9.9 2.0 260	15.2 1.5 645	91.8 6.3 5,323	38.6 3.5 1,920	54.0 4.1 2,239	92.5 4.3 2,868	117.3 6.4 5,397	72.6 5.2 3,848	96.1 5.9 3,171	52.7 2.0 803	42.5 1.6 819	64.9 4.3 28,267
Equetus acuminatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Equetus lanceolatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Larimus fasciatus	2.2 0.1 43	0.2 * 4	0.7 0.1 30	0.7 0.1 43	0.2 * 10	0.1 * 3	0.4 * 11	1.0 0.1 46	0.3 * 18	0.6 * 19	0.3 * 4	0.3 * 5	0.5 * 236
Leiostomus xanthurus	180.2 11.9 3,559	23.5 4.7 616	264.7 25.6 11,250	376.8 25.9 21,852	37.8 3.5 1,883	80.6 6.1 3,345	169.6 7.8 5,259	27.5 1.5 1,267	23.9 1.7 1,266	19.8 1.2 654	27.5 1.0 419	38.0 1.4 732	119.7 8.0 52,102
Menticirrhus spp. (largely americanus)	145.8 9.7 2,880	33.7 6.8 884	34.8 3.4 1,478	29.4 2.0 1,704	7.4 0.7 370	11.4 0.9 475	17.9 0.8 554	23.7 1.3 1,091	20.9 1.5 1,106	42.4 2.6 1,400	76.5 2.8 1,167	84.8 3.2 1,632	33.9 2.3 14,741
Micropogon undulatus	15.6 1.0 308	2.7 0.6 72	4.6 0.4 195	22.2 1.5 1,288	109.2 10.0 5,434	310.7 23.4 12,893	450.1 20.8 13,953	312.8 17.0 14,387	111.2 7.9 5,895	48.6 3.0 1,604	18.8 0.7 286	3.6 0.1 70	129.5 8.6 56,385
Pogonias cromis	-	-	-	-	-	-	-	-	* * 1	-	* * 2	-	* * 3
Stellifer lanceolatus	716.7 47.4 14,154	139.7 28.0 3,666	323.3 31.3 13,742	477.4 32.8 27,690	265.3 42.6 23,148	485.8 36.6 20,159	1,132.4 52.3 35,104	903.6 49.0 41,564	848.3 60.2 44,960	964.0 58.7 31,811	1,894.5 70.1 28,891	1,823.0 67.9 35,092	735.2 48.9 319,981
Mullus auratus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagodon rhomboides	0.1 * 1	-	-	* * 1	-	0.1 * 3	0.7 * 21	* * 2	-	-	-	-	0.1 * 28
Stenotomus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaetodipterus faber	-	-	0.1 * 2	0.6 * 32	9.3 0.9 463	9.9 0.8 409	3.4 0.2 106	22.5 1.2 1,035	11.2 0.8 592	3.8 0.2 126	0.5 * 8	-	6.4 0.4 2,773
Xyrichthys spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichiurus lepturus	35.4 2.3 700	4.4 0.9 116	21.9 2.1 932	27.2 1.9 1,576	59.5 5.5 2,962	49.5 3.7 2,053	36.5 1.7 1,130	8.5 0.5 392	1.7 0.1 92	9.5 0.6 312	7.9 0.3 121	6.2 0.2 120	24.1 1.6 10,506
Scomberomorus maculatus	0.1 * 2	0.1 * 3	-	* * 1	-	-	-	0.1 * 3	0.2 * 12	0.2 * 7	2.4 0.1 36	0.8 * 16	0.2 * 80
Gobionellus oceanicus	-	-	-	-	* * 1	-	* * 1	-	-	-	-	-	* * 2

Table 4.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
	0.1												*
Scorpaena spp.	*	-	-	-	-	-	-	-	-	-	-	-	*
	2												2
	4.1	1.4	4.5	13.2	10.9	3.0	1.3	0.1	0.1	0.9	1.4	3.6	4.4
Prionotus spp.	0.3	0.3	0.5	0.9	1.0	0.2	0.1	*	*	*	*	0.2	0.3
	80	37	195	765	543	122	40	5	7	27	21	69	1,911
	1.4	0.8	0.5	0.7	1.1	0.7	0.8	0.1	*	0.1		1.6	0.6
Astroscopus y-graecum	0.1	0.2	*	0.1	0.1	0.1	*	*	*	*	-	0.1	*
	28	20	19	43	56	27	24	4	1	4		30	256
	0.2		0.1				*				0.1		*
Hypsoblennius spp.	*	-	*	-	-	-	*	-	-	-	*	-	*
	3		2				1				2		8
				0.1		*							*
Rissola marginata	-	-	-	*	-	*	-	-	-	-	-	-	*
				3		1							4
	9.3	4.3	12.2	50.3	92.0	25.1	10.7	6.5	7.7	9.9	8.2	3.9	25.1
Peprilus alepidotus	0.6	0.9	1.2	3.5	8.4	1.9	0.5	0.4	0.5	0.6	0.3	0.2	1.7
	184	112	519	2,916	4,578	1,041	332	301	409	326	125	76	10,919
	4.4	4.6	5.3	7.3	9.9	3.7	0.2	2.3	14.5	11.0	3.9	7.4	6.8
Poronotus triacanthus	0.3	0.9	0.5	0.5	0.9	0.3	*	0.1	1.0	0.7	0.1	0.3	0.5
	87	122	227	425	491	153	6	106	769	362	59	142	2,949
						0.1				2.2			0.2
Sphyraena spp.	-	-	-	-	-	*	-	-	-	0.1	-	-	*
(largely guachancho)						2				71			73
											0.1		*
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	*	-	*
											2		2
						*							*
Polydactylus octonemus	-	-	-	-	-	*	-	-	-	-	-	-	*
						1							1
	1.1	0.8	2.5	8.1	2.2	0.6					0.1		1.7
Ancylopsetta quadrocellata	0.1	0.2	0.2	0.6	0.2	0.1	-	-	-	-	*	-	0.1
	21	22	106	470	109	26					1		755
	0.1		0.1		0.1	1.4	2.0	0.7	0.5	*			0.4
Citharichthys spp.	*	-	*	-	*	0.1	0.1	*	*	*	-	-	*
(largely spilopterus)	1		3		6	60	61	34	24	1			190
	131.8	64.5	66.7	91.1	9.6	2.5	6.0	16.8	34.4	128.2	278.8	420.4	74.3
Etropus crossotus	8.7	13.0	6.5	6.3	0.9	0.2	0.3	0.9	2.4	7.8	10.3	15.7	4.9
	2,604	1,694	2,833	5,281	480	105	185	773	1,825	4,230	4,251	8,092	32,353
	2.6	1.7	1.8	2.4	5.7	6.2	14.5	3.0	2.9	4.5	2.0	3.5	4.2
Paralichthys dentatus	0.2	0.3	0.2	0.2	0.5	0.5	0.7	0.2	0.2	0.3	0.1	0.1	0.3
	51	44	78	142	284	257	451	137	154	149	31	67	1,845
	0.1	0.3	*							0.8	0.6	0.4	0.1
Paralichthys lethostigma	*	0.1	*	-	-	-	-	-	-	0.1	*	*	*
	2	7	1							27	9	8	54
	0.1	4.3	17.2	9.2	1.4					0.5	0.1	0.1	3.4
Scophthalmus aquosus	*	0.9	1.5	0.6	0.1	-	-	-	-	*	*	*	0.2
	1	113	730	533	69					17	2	2	1,467
Syacium spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Bothus ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.6	1.8	0.9	8.8	15.3	29.6	40.0	80.0	41.8	34.9	29.4	14.5	26.7
Trinectes maculatus	*	0.4	0.1	0.6	1.4	2.2	1.9	4.3	3.0	2.1	1.1	0.5	1.8
	11	46	38	510	761	1,228	1,239	3,679	2,217	1,151	449	279	11,608
	25.5	4.3	9.1	35.4	6.0	1.3	1.4	4.7	8.7	23.5	44.8	76.2	16.2
Symphurus spp.	1.7	0.9	0.9	2.4	0.6	0.1	0.1	0.3	0.6	1.4	1.7	2.8	1.1
(largely plagiusa)	504	113	386	2,051	300	56	42	218	459	776	683	1,466	7,054
					*	*							*
Echeneis naucrates	-	-	-	-	*	*	-	-	-	-	-	-	*
					2	1							3
Balistes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alutera schoepfii	-	-	-	-	-	-	-	-	-	-	-	-	-
Stephanolepis spp.	-	-	-	-	-	-	-	-	0.1 * 6	-	-	-	* * 6
Acanthostracion spp. (largely quadricornis)	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagocephalus laevigatus	-	-	-	-	-	-	* * 1	0.1 * 6	-	-	-	-	* * 7
Sphaeroides spp.	-	-	-	* * 1	-	-	-	-	-	0.1 * 4	-	-	* * 5
Chilomycterus schoepfi	2.0 0.1 39	0.3 0.1 7	0.3 * 14	1.1 0.1 63	0.4 * 20	0.4 * 17	1.4 0.1 42	0.9 0.1 40	1.4 0.1 73	4.3 0.3 141	6.8 0.3 104	3.7 * 72	1.5 0.1 632
Opsanus tau	0.7 0.1 14	0.1 * 3	0.1 * 2	1.5 0.1 87	0.3 * 17	0.1 * 6	0.9 * 27	0.2 * 7	0.1 * 3	0.3 * 9	0.3 * 4	0.4 * 8	0.4 * 187
Porichthys porosissimus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ogcocephalus spp. (largely vespertilio)	-	-	-	-	-	-	-	-	-	0.1 * 2	1.2 * 18	-	0.1 * 20
Total	1,512.1 100.1 29,853	498.2 100.4 13,076	1,032.5 99.8 43,886	1,457.4 100.3 84,537	892.2 99.8 54,366	1,326.6 99.9 55,052	2,165.1 100.0 67,119	1,842.2 100.1 84,895	1,408.3 99.7 74,662	1,643.0 100.0 54,204	2,703.9 100.1 41,232	2,684.4 100.0 51,674	1,503.5 99.9 654,556

Table 5.--Fish taken by trawling, Florida Outside, M/V Launch 58, 1933-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.	-	-	-	-	-	-	0.2 * 3	-	-	-	-	0.5 * 4	0.1 * 7
Scoliodon terraenovae	-	-	-	-	-	-	0.1 * 1	0.5 * 6	-	0.9 * 6	0.1 * 1	0.1 * 1	0.2 * 15
Sphyrna tiburo	5.2 0.2 44	0.6 * 6	0.3 * 2	0.3 * 2	1.0 0.4 3	0.3 0.1 1	-	-	-	4.6 0.1 32	12.3 0.2 92	6.4 0.2 54	2.5 0.1 236
Sphyrna zygaena	0.2 * 2	-	0.8 0.1 5	-	-	1.0 0.3 3	0.4 * 5	-	0.2 * 2	0.3 * 2	1.2 * 9	0.4 * 3	0.3 * 31
Pristis pectinatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhinobatos lentiginosus	-	-	-	-	-	-	-	0.4 * 4	-	-	-	-	* * 4
Torpedo nobiliana	0.2 * 2	-	0.8 0.1 5	-	-	-	0.1 * 1	0.1 * 1	0.7 * 7	0.9 * 6	-	-	0.2 * 22
Raja eglanteria	1.1 * 9	1.8 0.1 17	1.2 0.1 7	2.5 0.2 16	-	-	-	-	6.0 0.1 60	2.3 * 16	0.5 * 4	0.9 * 8	1.4 0.1 137
Dasyatis americana	-	0.2 * 2	0.3 * 2	0.6 0.1 4	-	-	-	0.3 * 3	-	1.7 * 12	1.3 * 10	-	0.3 * 33
Dasyatis centroura	-	-	1.2 0.1 7	0.3 * 2	-	-	-	-	-	-	-	-	0.1 * 9
Dasyatis sabina	-	-	-	-	-	-	-	-	-	-	0.5 * 4	-	* * 4
Gymnura micrura	0.2 * 2	-	0.2 * 1	-	-	-	-	-	0.7 * 7	0.3 * 2	0.7 * 5	-	0.2 * 17
Aetobatus narinari	-	-	-	-	-	-	-	-	-	-	-	0.2 * 2	* * 2
Rhinoptera bonasus	0.1 * 1	-	0.7 * 4	-	-	-	-	-	0.2 * 2	0.1 * 1	-	-	0.1 * 8
Acipenser oxyrhynchus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lepisosteus osseus	-	-	-	-	-	-	-	-	-	-	-	-	-
Brevoortia spp. (tyrannus and smithi)	0.9 * 8	69.2 4.7 657	73.3 4.2 440	6.5 0.5 42	0.7 0.3 2	-	0.4 * 6	1.8 0.1 20	-	2.9 0.1 20	0.5 * 4	1.4 * 12	12.8 0.5 1,211
Opisthonema oglinum	-	2.1 0.1 20	-	0.8 0.1 5	-	-	-	0.4 * 4	-	0.6 * 4	-	0.2 * 2	0.4 * 35
All other genera and species of herrings	0.1 * 1	-	0.3 * 2	-	-	-	-	-	3.6 0.1 36	0.7 * 5	9.1 0.2 68	2.4 0.1 20	1.4 0.1 132
Anchoa spp. (largely mitchilli and hepsetus)	8.0 0.2 68	15.8 1.1 150	14.7 0.8 88	18.3 1.4 119	2.3 0.9 7	28.3 7.7 85	0.6 0.1 9	3.8 0.2 42	1.2 * 12	0.6 * 4	-	5.6 0.2 48	6.7 0.3 632
Synodus foetens	1.2 * 10	-	0.3 * 2	0.9 0.1 6	2.0 0.8 6	4.7 1.3 14	1.0 0.1 14	2.5 0.1 28	-	-	0.8 * 6	0.9 * 8	1.0 * 94
Trachinocephalus myops	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	146.1 4.3 1,242	4.6 0.3 44	19.0 1.1 114	5.1 0.4 33	0.3 0.1 1	1.7 0.5 5	1.4 0.1 19	2.5 0.1 28	692.8 15.4 6,928	138.9 2.5 972	186.1 3.4 1,396	80.1 2.1 681	121.3 4.5 11,463
Galeichthys felis	4.9 0.2 42	-	29.0 1.7 174	13.7 1.1 89	0.3 0.1 1	0.3 0.1 1	6.0 0.6 84	33.6 1.7 370	24.0 2.8 1,240	98.9 1.8 692	41.6 0.8 312	3.3 0.1 28	32.1 1.2 3,033
Ophichthus spp.	-	0.1 * 1	-	0.2 * 1	-	-	-	-	-	-	-	-	* * 2
Urophycis spp.	0.1 * 1	25.8 1.7 245	39.0 2.2 234	20.9 1.6 136	-	-	-	-	-	-	-	-	6.5 0.2 616
Fistularia tabacaria	-	-	-	-	-	-	-	-	-	-	-	-	-
Hippocampus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Syngnathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Centropristis striatus	0.2 * 2	0.3 * 3	1.3 0.1 8	1.5 0.1 10	0.7 0.3 2	-	1.4 0.1 19	15.3 0.8 168	2.0 * 20	1.7 * 12	-	-	2.6 0.1 244
Centropristis philadelphicus	14.8 0.4 126	2.0 0.1 19	17.0 1.0 102	2.5 0.2 16	8.3 3.2 25	3.3 0.9 10	40.1 4.0 561	86.9 4.3 956	50.2 1.1 502	45.1 0.8 316	37.3 0.7 280	32.2 0.9 274	33.7 1.2 3,187
Diplectrum formosum	-	-	0.3 * 2	-	-	-	-	-	-	-	-	-	* * 2
Lobotes surinamensis	-	-	-	-	-	-	-	-	-	-	-	-	-
Pomatomus saltatrix	0.1 * 1	0.1 * 1	1.0 0.1 6	0.3 * 2	-	0.7 0.2 2	-	-	0.4 * 4	-	0.5 * 4	-	0.2 * 20
Rachycentron canadum	-	-	-	-	-	-	-	-	-	-	-	-	-
Caranx crysos	1.9 0.1 16	-	-	-	0.3 0.1 1	-	0.1 * 2	-	8.0 0.2 80	0.6 * 4	1.1 * 8	1.6 * 14	1.3 0.1 125
Caranx spp.	1.1 * 9	-	-	-	-	-	-	-	0.2 * 2	-	-	-	0.1 * 11
Chloroscombrus chrysurus	331.1 9.8 2,814	4.0 0.3 38	15.3 0.9 92	49.8 3.8 324	73.0 27.8 219	79.7 21.6 239	58.1 5.7 813	138.9 6.8 1,528	262.8 5.9 2,628	624.6 11.1 4,372	458.1 8.4 3,436	1,107.3 29.5 9,412	274.8 10.1 25,915
Decapterus punctatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Selene vomer	10.4 0.3 88	-	-	-	-	1.3 0.4 4	0.4 * 5	-	-	-	1.6 * 12	3.3 0.1 28	1.4 0.1 137
Trachinotus spp.	0.5 * 4	-	-	-	-	-	-	-	-	-	0.5 * 4	-	0.1 * 8
Trachurus lathami	-	-	-	-	-	-	0.4 * 5	-	-	-	-	-	0.1 * 5
Vomer setapinnis	131.8 3.9 1,120	10.2 0.7 97	24.3 1.4 146	3.2 0.3 21	1.3 0.5 4	9.7 2.6 29	1.1 0.1 15	11.6 0.6 128	80.4 1.8 804	328.6 5.8 2,300	271.2 5.0 2,034	443.4 11.8 3,769	110.8 4.1 10,467
Eucinostomus spp.	-	-	0.2 * 1	0.3 * 2	5.7 2.2 17	-	1.4 0.1 19	1.0 0.1 11	-	-	0.5 * 4	3.8 0.1 32	0.9 * 86

Table 5.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	-	-	-	-	-	-	-
Orthopristis chrysopterus	2.4 0.1 20	0.2 * 2	6.0 0.3 36	0.9 0.1 6	4.3 1.7 13	0.3 0.1 1	0.7 0.1 10	11.6 0.6 128	14.8 0.3 148	23.4 0.4 164	2.1 * 16	0.9 * 8	5.8 0.2 552
Bairdiella chrysura	6.0 0.2 51	2.2 0.2 21	5.0 0.3 30	7.7 0.6 50	-	5.7 1.5 17	3.6 0.4 50	4.9 0.2 54	0.8 * 8	12.0 0.2 84	11.7 0.2 88	2.8 0.1 24	5.0 0.2 477
Cynoscion nebulosus	-	-	-	-	-	-	-	-	-	-	-	-	-
Cynoscion nothus	296.6 8.8 2,521	93.3 6.3 886	161.5 9.3 969	500.6 38.4 3,254	23.0 8.8 69	80.0 21.7 240	52.9 5.2 7,401	197.9 9.7 2,177	325.6 7.3 3,256	253.1 4.5 1,772	492.3 9.0 3,692	611.8 16.3 5,200	262.2 9.6 24,776
Cynoscion regalis	137.1 4.1 1,165	36.1 2.4 343	35.8 2.1 215	38.6 3.0 251	-	0.7 0.2 2	4.7 0.5 66	16.2 0.8 178	68.9 1.5 689	70.3 1.3 492	67.2 1.2 504	54.7 1.5 465	46.2 1.7 4,370
Equetus acuminatus	-	-	-	-	-	0.3 0.1 1	-	-	-	-	-	-	* * 1
Equetus lanceolatus	-	-	-	-	-	0.3 0.1 1	-	-	-	-	-	-	* * 1
Larimus fasciatus	51.8 1.5 440	29.9 2.0 284	25.2 1.4 151	69.1 5.3 449	15.3 5.8 46	17.0 4.6 51	3.0 0.3 42	26.4 1.3 290	27.2 0.6 272	52.0 0.9 364	170.1 3.1 1,276	61.1 1.6 519	44.3 1.6 4,184
Leiostomus xanthurus	218.5 6.5 1,857	230.7 15.6 2,192	134.7 7.7 808	60.0 4.6 390	9.3 3.6 28	44.3 12.0 133	208.8 20.6 2,923	166.7 8.2 1,834	123.2 2.7 1,232	214.9 3.8 1,504	180.8 3.3 1,356	57.5 1.5 489	156.0 5.7 14,746
Menticirrhus spp. (largely americanus)	186.0 5.5 1,581	134.2 9.1 1,275	116.8 6.7 701	248.4 19.1 1,615	3.3 1.3 10	1.3 0.4 4	28.1 2.8 394	60.3 3.0 663	286.0 6.4 2,860	754.3 13.4 5,280	448.3 8.2 3,362	123.3 3.3 1,048	198.9 7.3 18,793
Micropogon undulatus	190.8 5.7 1,622	25.7 1.7 244	16.8 1.0 101	20.0 1.5 130	85.0 32.4 255	43.3 11.7 130	367.6 36.3 5,147	814.4 39.8 8,958	1,018.8 22.7 10,188	604.0 10.7 4,228	1,198.1 21.9 8,986	587.8 15.6 4,996	476.0 17.5 44,985
Pogonias cromis	-	0.1 * 1	-	-	-	-	-	-	-	0.3 * 2	-	-	* * 3
Stellifer lanceolatus	1,482.6 43.9 12,602	620.7 42.0 5,897	925.5 53.0 5,553	133.7 10.3 869	-	13.3 3.6 40	165.7 16.4 2,320	315.7 15.4 3,473	1,212.6 27.0 12,126	2,169.1 38.5 15,184	1,642.7 30.0 12,320	325.2 8.7 2,764	774.1 28.4 73,148
Mullus auratus	-	-	-	-	0.7 0.3 2	-	-	-	-	-	-	-	* * 2
Lagodon rhomboides	1.6 0.1 14	-	0.7 * 4	0.6 0.1 4	4.0 1.5 12	-	2.1 0.2 29	3.6 0.2 40	0.8 * 8	0.6 * 4	4.3 0.1 32	4.2 0.1 36	1.9 0.1 183
Stenotomus spp.	0.5 * 4	-	-	-	-	-	-	-	-	-	-	0.7 * 6	0.1 * 10
Chaetodipterus faber	15.1 0.5 128	16.2 1.1 154	10.0 0.6 60	6.6 0.5 43	7.3 2.8 22	0.7 0.2 2	-	0.1 * 1	3.2 0.1 32	35.4 0.6 248	66.1 1.2 496	81.1 2.2 689	19.8 0.7 1,875
Xyrichthys spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichiurus lepturus	64.7 1.9 550	38.4 2.6 365	12.3 0.7 74	13.8 1.1 90	-	3.3 0.9 10	15.2 1.5 213	20.2 1.0 222	35.8 0.8 358	24.6 0.4 172	31.5 0.6 236	70.8 1.9 602	30.6 1.1 2,892
Scomberomorus maculatus	-	-	-	-	-	-	-	-	-	-	0.1 * 1	-	* * 1
Gobionellus oceanicus	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Scorpaena spp.	-	-	-	-	-	-	-	-	-	-	-	0.1 * 1	* * 1
Prionotus spp.	0.5 * 4	7.6 0.5 72	0.5 * 3	4.9 0.4 32	3.7 1.4 11	4.7 1.3 14	14.8 1.4 207	36.8 1.8 405	6.4 0.2 64	2.9 0.1 20	2.6 * 20	-	9.0 0.3 852
Astroscopus y-graecum	-	-	-	-	-	-	-	-	-	-	-	-	-
Hypsoblennius spp.	-	0.1 * 1	-	-	-	-	-	-	-	-	-	-	* * 1
Rissola marginata	-	-	-	-	-	-	-	-	-	-	-	0.4 * 3	* * 3
Peprilus alepidotus	26.9 0.8 229	52.1 3.5 495	17.2 1.0 103	1.1 0.1 7	-	0.3 0.1 1	1.6 0.2 22	9.8 0.5 108	5.2 0.1 52	15.4 0.3 108	16.0 0.3 120	18.9 0.5 161	14.9 0.6 1,406
Poronotus triacanthus	4.7 0.1 40	15.4 1.0 146	8.5 0.5 51	19.5 1.5 127	3.3 1.3 10	18.7 5.1 56	0.4 * 5	11.0 0.5 121	5.2 0.1 52	3.4 0.1 24	0.5 * 4	32.9 0.9 280	9.7 0.4 916
Sphyraena spp. (largely guachancho)	-	-	-	-	-	-	-	0.1 * 1	-	0.3 * 2	-	-	* * 3
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	-	-	-
Polydactylus octonemus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ancylopsetta quadrocellata	-	0.2 * 2	0.5 * 3	0.9 0.1 6	2.0 0.8 6	0.7 0.2 2	0.6 0.1 8	1.5 0.1 16	0.4 * 4	-	-	-	0.5 * 47
Citharichthys spp. (largely spilopterus)	-	0.2 * 2	-	-	0.3 0.1 1	0.3 0.1 1	0.9 0.1 12	1.5 0.1 16	-	2.9 0.1 20	0.5 * 4	0.5 * 4	0.6 * 60
Etropus crossotus	24.1 0.7 205	25.2 1.7 239	21.3 1.2 128	12.5 1.0 81	3.7 1.4 11	1.7 0.5 5	8.1 0.8 113	14.9 0.7 164	36.8 0.8 368	25.1 0.5 176	35.2 0.6 264	6.1 0.2 52	19.1 0.7 1,806
Paralichthys dentatus	-	0.2 * 2	-	0.8 0.1 5	-	-	1.0 0.1 14	1.8 0.1 20	1.8 * 18	2.9 0.1 20	2.1 * 16	0.2 * 2	1.0 * 97
Paralichthys lethostigma	-	-	-	-	-	-	-	-	-	-	-	-	-
Scophthalmus aquosus	-	-	-	-	-	-	-	-	-	-	-	-	-
Syacium spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Bothus ocellatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinectes maculatus	2.0 0.1 17	4.4 0.3 42	0.7 * 4	32.0 2.5 208	-	1.3 0.4 4	16.5 1.6 231	26.9 1.3 296	74.8 1.7 748	108.0 1.9 756	56.0 1.0 420	14.7 0.4 125	30.2 1.1 2,851
Symphurus spp. (largely plagiusa)	4.1 0.1 35	8.9 0.6 85	6.0 0.3 36	3.7 0.3 24	-	-	2.6 0.3 37	1.8 0.1 20	8.0 0.2 80	7.4 0.1 52	16.0 0.3 120	5.2 0.1 44	5.6 0.2 533
Echeneis naucrates	-	-	-	-	0.3 0.1 1	-	-	-	-	-	-	-	* * 1
Balistes spp.	-	-	-	-	-	-	-	-	0.4 * 4	-	-	-	* * 4

Table 5.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
			0.5										*
Alutera schoepfii	-	-	*	-	-	-	-	-	-	-	-	-	*
			3										3
					1.7			0.7	1.2	1.1	0.5		0.4
Stephanolepis spp.	-	-	-	-	0.3	-	-	*	*	*	*	-	*
					2			8	12	8	4		34
					0.3								*
Acanthostracion spp.	-	-	-	-	0.1	-	-	-	-	-	-	-	*
(largely quadricornis)					1								1
Lagocephalus laevigatus	-	-	-	-	-	-	-	-	-	-	-	-	-
												0.2	*
Sphaeroides spp.	-	-	-	-	-	-	-	-	-	-	-	*	*
												2	2
		0.3	0.7									0.5	0.1
Chilomycterus schoepfi	-	*	*	-	-	-	-	-	-	-	-	*	*
		3	4									4	11
Opsanus tau	-	-	-	-	-	-	-	-	-	-	-	-	-
								0.1	1.2			0.2	0.2
Porichthys porosissimus	-	-	-	-	-	-	-	*	*	-	-	*	*
								1	12			2	15
	0.1											0.9	0.1
Ogcocephalus spp.	*	-	-	-	-	-	-	-	-	-	-	*	*
(largely vespertilio)	1											8	9
	3,376.3	1,479.1	1,746.7	1,303.1	261.5	369.2	1,012.1	2,044.5	4,392.5	5,637.7	5,470.2	3,756.7	2,725.9
Total	100.0	99.7	100.0	99.8	100.4	100.5	99.8	100.2	99.9	100.1	99.7	100.0	100.1
	28,698	14,053	10,481	8,471	788	1,108	20,825	22,491	44,925	39,462	41,030	31,934	257,605

Table 6.--Fish taken by trawling, Georgia Inside and Georgia Outside combined, M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.	-	*	-	*	-	0.3	*	*	*	*	-	-	*
		*		*		*	*	*	*	*			*
		1		3		15	2	1	2	2			26
Scoliodon terraenovae	0.1			*	0.7	3.8	3.0	0.4	0.1	0.6	*	*	0.7
	*	-	-	*	0.1	0.3	0.2	*	*	*	*	*	0.1
	2			3	47	229	186	35	5	37	1	2	547
Sphyrna tiburo	0.2	0.1	0.1	1.0	0.7	1.3	0.4	0.2	1.1	0.7	2.0	0.2	0.6
	*	*	*	0.1	0.1	0.1	*	*	0.1	*	0.1	*	*
	6	4	4	83	53	80	22	18	90	43	70	8	481
Sphyrna zygaena	-	-	*	-	0.1	0.9	1.5	0.6	0.3	0.1	-	-	0.3
			*		*	0.1	0.1	*	*	*			*
			1		4	54	94	50	26	7			236
Pristis pectinatus	-	-	-	-	-	-	-	-	*	-	-	-	*
									*				*
									1				1
Rhinobatos lentiginosus	-	-	-	-	*	*		0.1	*	-	-	-	*
					*	*	-	*	*				*
					1	2		4	2				9
Torpedo nobiliana	-	-	-	-	-	-	-	-	-	-	-	-	-
Raja eglanteria	5.0	1.6	0.8	1.0	0.4		*	*	0.1	3.0	4.6	11.9	1.8
	0.4	0.2	0.1	0.1	*	-	*	*	*	0.2	0.2	0.5	0.1
	198	101	55	85	29		2	3	5	181	158	543	1360
Dasyatis americana	0.2	0.1	0.1	1.8	0.6	0.5	3.0	0.8	0.5	0.6	1.1	0.6	0.8
	*	*	*	0.1	0.1	*	0.2	0.1	*	*	*	*	0.1
	8	8	9	147	40	27	183	60	45	37	38	29	631
Dasyatis centroura	-	-	-	*	-	-	-	-	-	-	-	-	*
				*									*
				2									2
Dasyatis sabina	2.5	1.0	0.7	4.0	5.4	4.7	2.0	3.4	2.3	3.5	5.2	17.4	4.0
	0.2	0.1	0.1	0.3	0.5	0.4	0.1	0.2	0.1	0.2	0.2	0.7	0.3
	98	65	49	331	388	279	123	263	191	211	179	797	2,974
Gymnura micrura	-	*	-	0.6	1.7	1.1	2.0	0.7	0.7	0.5	0.1	0.2	0.7
		*		*	0.2	0.1	0.1	*	*	*	*	*	*
		2		48	122	63	123	51	57	28	4	8	506
Aetobatus narinari	-	0.1	-	*	-	-	*	-	-	-	-	*	*
		*		*			*					*	*
		9		3			1					2	15
Rhinoptera bonasus	-	0.4	1.7	0.2	1.0	0.3	0.6	0.1	0.4	0.2	-	0.1	0.5
		0.1	0.2	*	0.1	*	*	*	*	*		*	*
		29	114	17	72	19	37	10	29	11		4	342
Acipenser oxyrhynchus	-	*	-	-	-	-	-	-	-	-	-	0.2	*
		*										*	*
		2										8	10
Lepisosteus osseus	-	-	*	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
			*	*	*	*	*	*	*	*	*	*	*
			2	25	18	9	9	11	8	6	4	5	97
Brevoortia spp. (tyrannus and smithi)	79.1	160.6	39.3	7.8	15.0	12.6	5.5	1.7	0.6	0.9	1.8	9.7	26.4
	5.7	19.9	4.6	0.6	1.4	1.1	0.3	0.1	*	0.1	0.1	0.4	1.8
	3,143	10,438	2,695	650	1,074	748	335	129	46	52	60	445	19,815
Opisthonema oglinum	14.1	1.7	*	0.1	0.1	1.5	0.3	0.1		0.1		0.6	1.1
	1.0	0.2	*	*	*	0.1	*	*	-	*	-	*	0.1
	560	112	1	6	5	91	18	5		4		26	828
All other genera and species of herrings	1.0	0.8	0.3		0.4	0.1	*	*	0.1			*	0.2
	0.1	0.1	*	-	*	*	*	*	*	-	-	*	*
	38	50	20		32	4	2	2	6			2	156
Anchoa spp. (largely mitchilli and hepsetus)	40.6	22.8	36.9	59.4	30.2	28.6	7.3	5.9	18.9	70.4	116.2	51.8	36.7
	3.0	2.8	4.3	4.9	2.9	2.5	0.4	0.4	1.0	3.9	4.9	2.1	2.5
	1,615	1,483	2,531	4,941	2,168	1,702	448	462	1,557	4,257	3,980	2,369	27,513
Synodus foetens	0.2	*		0.3	0.6	1.0	1.0	1.2	0.5	1.9	5.7	1.3	0.9
	*	*	-	*	0.1	0.1	0.1	0.1	*	0.1	0.2	0.1	0.1
	8	1		28	46	60	59	90	39	117	194	61	703
Trachinocephalus myops	-	-	-	-	-	-	-	-	0.1	-	-	-	*
									*				*
									6				6

Table 6.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
			*	5.8	29.0	32.8	21.0	71.7	121.1	62.6	53.8	0.1	36.0
Bagre marinus	-	-	*	0.5	2.8	2.9	1.3	4.4	6.5	3.5	2.2	*	2.5
			3	480	2,079	1,953	1,278	5,596	9,963	3,788	1,841	6	26,987
	1.4	*	0.3	41.1	62.9	81.7	52.9	107.3	36.1	19.4	15.6	2.1	39.0
Galeichthys felis	0.1	*	*	3.4	6.1	7.2	3.2	6.6	2.0	1.1	0.6	0.1	2.7
	56	1	21	3,425	4,513	4,864	3,225	8,369	2,977	1,174	533	94	29,252
		*						*	*			*	*
Ophichthus spp.	-	*	-	-	-	-	-	*	*	-	-	*	*
		1						1	1			1	4
	4.1	66.0	131.8	25.2	1.5							*	20.9
Urophycis spp.	0.3	8.2	15.2	2.1	0.1	-	-	-	-	-	-	*	1.4
	162	4,293	9,026	2,095	105							2	15,683
									*				*
Fistularia tabacaria	-	-	-	-	-	-	-	-	*	-	-	-	*
									2				2
	*		*				*						*
Hippocampus spp.	*	-	*	-	-	-	*	-	-	-	-	-	*
	1		1				1						3
	0.1	0.1	*					0.1				*	*
Syngnathus spp.	*	*	*	-	-	-	-	*	-	-	-	*	*
	2	4	1					5				1	13
	1.4	0.3	0.2	0.8	0.4	0.3	*	0.2	0.1	0.3	0.6	0.2	0.4
Centropristis striatus	0.1	*	*	0.1	*	*	*	*	*	*	*	*	*
	57	22	14	63	30	17	1	13	11	21	20	11	280
	0.5	0.3	0.1	0.1	0.1		*	*	0.5	3.1	5.8	1.6	0.7
Centropristis philadelphicus	*	*	*	*	*	-	*	*	*	0.2	0.2	0.1	0.1
	18	19	8	8	4		1	3	45	187	198	71	562
					0.4	0.1	0.3	0.6	3.2		0.1		0.5
Diplectrum formosum	-	-	-	-	*	*	*	*	0.2	-	*	-	*
					28	4	20	48	260		2		362
				*	*	*	*	*					*
Lobotes surinamensis	-	-	-	*	*	*	*	*	-	-	-	-	*
				1	2	2	3	1					9
	2.5	2.1	0.7	0.2	1.4	0.3	0.1	*		0.1	2.4	2.8	0.9
Pomatomus saltatrix	0.2	0.3	0.1	*	0.1	*	*	*	-	*	0.1	0.1	0.1
	99	134	49	19	103	20	5	2		7	83	129	650
										*			*
Rachycentron canadum	-	-	-	-	-	-	-	-	-	*	-	-	*
										1			1
			*	*	*	0.2	0.5	0.7	1.0	0.9		0.1	0.3
Caranx crysos	-	-	*	*	*	*	*	*	0.1	0.1	-	*	*
			2	1	2	13	29	54	82	56		4	243
Caranx spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
	66.9	27.6	6.8	0.4	17.8	44.1	66.7	88.4	120.7	36.8	62.4	31.9	47.5
Chloroscombrus chrysurus	4.9	3.4	0.8	*	1.7	3.9	4.1	5.4	6.5	2.1	2.6	1.3	3.3
	2,661	1,792	467	36	1,276	2,624	4,069	6,898	9,927	2,227	2,137	1,460	35,574
							*						*
Decapterus punctatus	-	-	-	-	-	-	*	-	-	-	-	-	*
							1						1
	0.4	0.2		*	*	2.6	5.4	3.4	2.8	9.4	3.6	0.5	2.3
Selene vomer	*	*	-	*	*	0.2	0.3	0.2	0.2	0.5	0.1	*	0.2
	14	16		1	1	156	327	264	234	570	122	24	1,729
					*		0.3	1.3	*	0.1	*		0.2
Trachinotus spp.	-	-	-	-	*	-	*	0.1	*	*	*	-	*
					3		18	98	2	9	1		131
Trachurus lathami	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.6	0.3	0.4	0.3	2.1	0.3	0.2	3.7	6.8	7.1	50.9	52.3	7.6
Vomer setapinnis	*	*	*	*	0.2	*	*	0.2	0.4	0.4	2.1	2.1	0.5
	22	18	24	23	151	20	14	286	556	431	1,744	2,395	5,684
								0.1	0.4	0.2	1.7	0.1	0.1
Eucinostomus spp.	-	-	-	-	-	-	-	*	*	*	0.1	*	*
								5	32	13	57	3	110

Table 6.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	0.2 * 12	-	-	-	-	-	* * 12
Orthopristis chrysopterus	0.5 * 20	-	-	* * 1	-	* * 2	1.9 0.1 118	0.5 * 36	3.4 0.2 283	0.5 * 30	0.6 * 22	* * 1	0.7 0.1 513
Bairdiella chrysura	10.2 0.7 406	3.9 0.5 251	4.6 0.5 316	18.1 1.5 1,507	9.7 0.9 698	5.0 0.4 297	6.4 0.4 392	3.9 0.2 306	6.2 0.3 514	10.8 0.6 655	6.8 0.3 234	15.4 0.6 706	8.4 0.6 6,282
Cynoscion nebulosus	0.4 * 17	0.1 * 8	* * 2	0.1 * 10	0.5 0.1 35	0.6 0.1 38	1.0 0.1 63	0.4 * 32	0.4 * 30	0.1 * 8	0.3 * 10	0.5 * 25	0.4 * 278
Cynoscion nothus	0.4 * 16	* * 1	* * 1	2.6 0.2 219	5.0 0.5 359	3.4 0.3 202	7.2 0.4 441	33.2 2.0 2,586	47.7 2.6 3,926	0.7 * 45	8.1 0.3 279	6.9 0.3 315	11.2 0.8 8,390
Cynoscion regalis	54.4 4.0 2,163	29.3 3.6 1,905	11.9 1.4 815	77.4 6.3 6,442	34.5 3.3 2,475	40.0 3.5 2,379	70.8 4.3 4,316	91.1 5.6 7,109	71.8 3.9 5,908	74.6 4.2 4,511	54.9 2.3 1,880	87.9 3.6 4,021	58.6 4.0 43,924
Equetus acuminatus	-	-	-	-	-	-	-	-	-	-	-	-	-
Equetus lanceolatus	-	-	-	-	-	-	0.1 * 4	-	-	-	-	-	* * 4
Larimus fasciatus	4.6 0.3 181	1.6 0.2 106	1.7 0.2 117	3.2 0.3 264	6.2 0.6 447	3.8 0.3 227	6.6 0.4 403	19.5 1.2 1,522	28.8 1.6 2,371	13.6 0.8 821	42.8 1.8 1,467	5.6 0.2 257	10.9 0.8 8,183
Leiostomus xanthurus	134.0 9.7 5,328	166.1 20.5 10,794	224.0 25.9 15,342	268.6 22.0 22,361	89.2 8.6 6,399	60.6 5.3 3,608	105.9 6.4 6,457	40.0 2.5 3,119	30.9 1.7 2,545	18.5 1.0 1,118	33.4 1.4 1,145	182.6 7.5 8,355	115.5 7.9 86,571
Menticirrhus spp. (largely *americanus*)	174.5 12.7 6,936	78.9 9.8 5,128	32.5 3.8 2,228	46.5 3.8 3,870	11.9 1.2 856	13.3 1.2 790	21.6 1.3 1,320	36.0 2.2 2,811	45.6 2.5 3,748	105.3 5.9 6,369	162.0 6.8 5,549	137.4 5.6 6,288	61.2 4.2 45,893
Micropogon undulatus	54.6 4.0 2,170	3.0 0.4 197	3.9 0.4 266	15.9 1.3 1,320	82.4 8.0 5,913	244.4 21.5 14,544	295.3 17.9 18,015	290.6 17.8 22,664	312.3 16.8 25,685	118.8 6.7 7,185	53.4 2.2 1,828	17.2 0.7 786	134.2 9.2 100,573
Pogonias cromis	-	-	* * 1	-	-	-	-	-	* * 1	* * 1	0.1 * 4	* * 2	* * 9
Stellifer lanceolatus	535.7 38.9 21,295	138.9 17.2 9,028	246.0 28.4 16,852	430.5 35.2 35,836	413.8 39.9 29,691	422.8 37.3 25,156	822.1 50.0 50,146	695.9 42.7 54,283	833.1 44.9 68,521	1,021.5 57.3 61,798	1,423.6 59.4 48,758	1,414.5 58.0 64,715	648.5 44.5 486,079
Mullus auratus	-	-	-	-	-	-	-	-	-	-	-	-	-
Lagodon rhomboides	0.1 * 2	0.5 0.1 30	-	* * 1	10.5 1.0 752	1.1 0.1 67	7.9 0.5 483	* * 2	-	0.4 * 26	1.0 * 35	0.3 * 13	1.9 0.1 1,411
Stenotomus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaetodipterus faber	-	-	* * 2	0.5 * 45	6.6 0.6 473	7.1 0.6 423	2.1 0.1 127	21.4 1.3 1,669	16.9 0.9 1,389	6.9 0.4 418	1.2 * 40	* * 1	6.1 0.4 4,587
Xyrichthys spp.	-	-	-	0.3 * 24	1.7 0.2 124	0.6 0.1 37	1.2 0.1 76	1.4 0.1 109	2.8 0.2 228	-	0.1 * 2	-	0.8 0.1 600
Trichiurus lepturus	24.4 1.8 969	11.4 1.4 742	23.1 2.7 1,584	24.8 2.0 2,061	52.2 5.0 3,742	42.6 3.8 2,536	46.2 2.8 2,818	21.1 1.3 1,646	6.8 0.4 559	5.9 0.3 356	16.6 0.7 570	37.0 1.5 1,695	25.7 1.8 19,278
Scomberomorus maculatus	0.1 * 2	0.1 * 5	-	* * 1	* * 1	-	* * 2	0.1 * 9	0.2 * 16	0.2 * 15	1.6 0.1 56	0.3 * 16	0.2 * 123
Gobionellus oceanicus	-	-	-	-	* * 2	-	* * 2	-	-	-	-	-	* * 4

Table 6.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
	0.1								*		0.1		*
Scorpaena spp.	*	-	-	-	-	-	-	-	*	-	*	-	*
	2								2		2		6
	4.0	2.3	3.2	11.7	8.5	9.5	4.6	2.9	2.3	5.0	8.3	8.4	5.8
Prionotus spp.	0.3	0.3	0.4	1.0	0.9	0.8	0.3	0.1	0.1	0.3	0.4	0.4	0.4
	159	153	219	970	610	566	277	223	193	300	285	384	4,339
	1.2	0.4	0.3	0.6	0.8	0.6	0.4	0.1	0.1	0.1	0.1	1.1	0.4
Astroscopus y-graecum	0.1	0.1	*	*	0.1	0.1	*	*	*	*	*	*	*
	48	26	19	48	60	36	24	4	8	4	4	49	330
	0.1		*	*	*		*				0.1		*
Hypsoblennius spp.	*	-	*	*	*	-	*	-	-	-	*	-	*
	3		3	2	1		1				2		12
	*			*		*					0.1	0.1	*
Rissola marginata	*	-	-	*	-	*	-	-	-	-	*	*	*
	1			4		2					2	4	13
	9.7	5.1	10.6	38.9	68.9	22.0	8.1	6.7	9.3	10.7	8.2	21.6	19.5
Peprilus alepidotus	0.7	0.6	1.2	3.2	6.6	1.9	0.5	0.4	0.5	0.6	0.3	0.9	1.3
	385	333	724	3,242	4,942	1,307	495	519	763	646	282	989	14,627
	8.8	11.7	11.4	11.6	18.3	4.0	1.4	2.3	23.5	8.9	9.9	15.5	10.9
Poronotus triacanthus	0.6	1.4	1.3	0.9	1.8	0.4	0.1	0.1	1.3	0.5	0.4	0.6	0.8
	350	758	781	965	1,316	239	85	183	1,930	538	338	709	8,192
	*					*			*	1.2			0.1
Sphyraena spp.	*	-	-	-	-	*	-	-	*	0.1	-	-	*
(largely guachancho)	1					2			1	71			75
											0.3	*	*
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	*	*	*
											11	1	12
						*							*
Polydactylus octonemus	-	-	-	-	-	*	-	-	-	-	-	-	*
						1							1
	1.4	0.8	1.6	5.9	2.4	1.6	0.5	0.4	0.2	0.1	0.4	0.1	1.4
Ancylopsetta quadrocellata	0.1	0.1	0.2	0.5	0.2	0.2	*	*	*	*	*	*	0.1
	55	55	107	488	169	98	29	29	17	6	13	5	1,071
	0.5	0.2	0.1	*	0.6	1.6	3.0	1.1	1.1	0.6	1.5	2.9	1.0
Citharichthys spp.	*	*	*	*	0.1	0.1	0.2	0.1	0.1	*	0.1	0.1	0.1
(largely spilopterus)	21	14	6	1	43	93	180	84	92	34	52	131	751
	109.4	52.8	47.7	65.0	8.1	2.1	7.3	11.4	31.2	89.3	157.6	216.2	55.7
Etropus crossotus	7.9	6.5	5.5	5.3	0.8	0.2	0.4	0.7	1.7	5.0	6.6	8.9	3.8
	4,348	3,429	3,268	5,410	582	123	443	887	2,564	5,403	5,399	9,891	41,747
	2.0	1.4	1.3	1.8	4.1	4.7	9.7	2.3	2.2	3.0	2.2	3.9	3.2
Paralichthys dentatus	0.2	0.2	0.2	0.1	0.4	0.4	0.6	0.1	0.2	0.2	0.1	0.2	0.2
	81	90	92	150	295	280	591	181	185	182	77	180	2,384
	0.1	0.2	*							0.5	0.4	0.3	0.1
Paralichthys lethostigma	*	*	*	-	-	-	-	-	-	*	*	*	*
	2	15	1							29	15	13	75
	1.1	4.0	12.8	10.3	8.9	0.7	1.4	0.1	0.2	2.0	3.2	1.3	4.2
Scophthalmus aquosus	0.1	0.5	1.5	0.8	0.9	0.1	0.1	*	*	0.1	0.1	0.1	0.3
	42	263	879	858	636	40	87	10	18	119	109	60	3,121
						0.1		0.2	0.4				0.1
Syacium spp.	-	-	-	-	-	*	-	*	*	-	-	-	*
						6		19	36				61
						*		0.1					*
Bothus ocellatus	-	-	-	-	-	*	-	*	-	-	-	-	*
						2		4					6
	5.0	2.7	1.1	8.4	11.5	21.3	33.5	51.4	33.9	36.2	28.7	20.5	21.6
Trinectes maculatus	0.4	0.3	0.1	0.7	1.1	1.9	2.0	3.2	1.8	2.0	1.2	0.8	1.5
	200	177	77	701	824	1,270	2,041	4,012	2,789	2,191	983	937	16,202
	18.2	6.9	6.7	27.9	6.0	1.1	3.2	3.0	7.7	21.9	28.2	51.9	13.6
Symphurus spp.	1.3	0.9	0.8	2.3	0.6	0.1	0.2	0.2	0.4	1.2	1.2	2.1	0.9
(largely plagiusa)	724	448	426	2,325	432	64	195	232	632	1,326	965	2,375	10,180
					*	*	*		*				*
Echeneis naucrates	-	-	-	-	*	*	*	-	*	-	-	-	*
					2	1	1		1				5
					*		*						*
Balistes spp.	-	-	-	-	*	-	*	-	-	-	-	-	*
					1		1						2

Table 6.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alutera schoepfii	-	-	-	*	*	0.1	0.1		0.1				*
				*	*	*	*	-	*	-	-	-	*
				2	3	3	4		8				20
Stephanolepis spp.	-	-	-	0.1	1.5	0.1	0.4	1.1	16.4				2.1
				*	0.1	*	*	0.1	0.9	-	-	-	0.1
				5	105	5	26	88	1,348				1,577
Acanthostracion spp. (largely *quadricornis*)	-	-	-	-	*	-	-	-	-	-	-	-	*
					*								*
					1								1
Lagocephalus laevigatus	-	-	-	-	*		0.1	0.1					*
					*	-	*	*	-	-	-	-	*
					1		4	7					12
Sphaeroides spp.	-	-	*	*	*		*	*		0.1	0.1	*	*
			*	*	*	-	*	*	-	*	*	*	*
			1	1	1		1	1		4	2	2	13
Chilomycterus schoepfi	1.2	0.1	0.3	0.9	0.4	0.4	0.9	0.7	1.1	3.5	4.1	2.0	1.1
	0.1	*	*	0.1	*	*	0.1	*	0.1	0.2	0.2	0.1	0.1
	46	9	19	75	28	21	53	52	91	209	140	92	835
Opsanus tau	0.4	*	*	1.2	0.2	0.1	0.4	0.1	*	0.1	0.1	0.2	0.3
	*	*	*	0.1	*	*	*	*	*	*	*	*	*
	14	3	2	98	17	6	27	7	3	9	4	8	198
Porichthys porosissimus	-	-	-	-	-	-	-	-	-	-	-	-	-
Ogcocephalus spp. (largely *vespertilio*)	-	-	-	-	-	-	-	-	0.2	0.2	1.0	*	0.1
									*	*	*	*	*
									15	13	34	2	64
Total	1,378.0	808.5	865.0	1,223.2	1,037.2	1,134.4	1,645.1	1,631.9	1,855.3	1,783.8	2,394.7	2,437.1	1,453.1
	99.9	99.9	99.9	99.8	100.0	99.7	99.7	99.7	100.2	99.8	99.6	99.7	100.0
	54,755	52,573	59,283	101,831	74,432	67,526	100,396	127,282	152,627	107,917	82,024	111,538	1,092,184

Table 7.--Fish taken by trawling, South Carolina Outside, Georgia Outside and Florida Outside combined, M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.				*		0.3	0.1	0.2				0.1	0.1
	-	-	-	*	-	*	*	*	-	-	-	*	*
				1		7	5	11				4	28
Scoliodon terraenovae					0.8	0.9	2.2	0.5	0.1	1.1	0.1	*	0.5
	-	-	-	-	0.1	0.1	0.2	*	*	*	*	*	*
					23	22	115	26	4	42	2	1	235
Sphyrna tiburo	1.3	0.1	0.1	0.3	0.8	0.8	0.2	0.4	0.6	1.0	4.8	1.5	0.9
	0.1	*	*	*	0.1	0.1	*	*	*	*	0.2	0.1	0.1
	44	6	4	10	22	20	12	18	25	38	152	62	413
Sphyrna zygaena	0.1		0.2			0.6	0.6	0.3	0.4	0.2	0.3	0.1	0.2
	*	-	*	-	-	0.1	*	*	*	*	*	*	*
	2		6			14	31	16	17	7	9	3	105
Pristis pectinatus									*				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									1				1
Rhinobatos lentiginosus					*	0.1		0.2	*				*
	-	-	-	-	*	*	-	*	*	-	-	-	*
					1	2		8	2				13
Torpedo nobiliana	0.1		0.1				*	*	0.2	0.2			0.1
	*	-	*	-	-	-	*	*	*	*	-	-	*
	2		5				1	1	7	6			22
Raja eglanteria	3.8	2.4	1.8	2.8	0.7		0.2	0.1	1.5	4.5	3.5	9.6	2.6
	0.2	0.2	0.2	0.4	0.1	-	*	*	0.1	0.2	0.1	0.4	0.2
	128	130	68	108	19		11	3	69	177	111	389	1,213
Dasyatis americana	0.2	0.2	0.3	4.9	0.7	0.3	3.7	1.0	0.9	1.1	0.9	0.5	1.3
	*	*	*	0.6	0.1	*	0.3	0.1	*	*	*	*	0.1
	8	12	10	189	19	7	192	47	40	45	29	19	617
Dasyatis centroura			0.2	0.1									*
	-	-	*	*	-	-	-	-	-	-	-	-	*
			7	4									11
Dasyatis sabina	0.9	1.0	0.7	1.1	0.4	0.4	0.3	1.8	2.5	1.9	1.8	15.7	2.5
	*	0.1	0.1	0.1	*	0.1	*	0.1	0.1	0.1	0.1	0.6	0.1
	29	55	26	42	10	9	18	88	114	76	57	635	1,159
Gymnura micrura	0.2	*	*	0.5	0.5	0.3	1.7	0.2	0.9	0.9	0.5	0.2	0.5
	*	*	*	0.1	0.1	*	0.1	*	*	*	*	*	*
	6	2	1	18	14	6	91	11	39	37	17	9	251
Aetobatus narinari		0.1		*			*				*	0.1	*
	-	*	-	*	-	-	*	-	-	-	*	*	*
		8		1			1				1	5	16
Rhinoptera bonasus	*	0.5	3.1	0.1	1.1	*	0.2	0.2	0.4	0.3		0.1	0.5
	*	0.1	0.4	*	0.1	*	*	*	*	*	-	*	*
	1	29	116	5	32	1	12	8	20	10		4	238
Acipenser oxyrhynchus		*										0.1	*
	-	*	-	-	-	-	-	-	-	-	-	*	*
		2										3	5
Lepisosteus osseus								*	*	*			*
	-	-	-	-	-	-	-	*	*	*	-	-	*
								2	1	1			4
Brevoortia spp.	119.5	202.2	59.2	4.0	34.5	24.7	3.2	1.4	0.7	0.9	1.0	9.7	41.5
(tyrannus and smithi)	5.5	17.0	7.2	0.5	3.8	3.5	0.3	0.1	*	*	*	0.4	2.4
	4,063	10,873	2,219	154	965	592	164	67	33	36	31	392	19,589
Opisthonema oglinum		0.4		0.2	0.1	4.1	0.2	0.2		0.2		1.0	0.3
	-	*	-	*	*	0.6	*	*	-	*	-	*	*
		20		9	4	99	10	10		6		4	162
All other genera and species of herrings	0.1	0.3	0.2		1.0	0.2	*	*	0.8	0.1	2.2	0.5	0.4
	*	*	*	-	0.1	*	*	*	*	*	0.1	*	*
	2	14	8		28	4	1	1	36	5	68	22	189
Anchoa spp. (largely mitchilli and hepsetus)	25.3	31.4	53.1	24.7	36.0	35.5	4.4	5.5	15.7	33.2	45.8	32.6	26.7
	1.2	2.6	6.4	3.2	4.0	5.1	0.4	0.4	0.5	1.2	1.6	1.2	1.5
	859	1,690	1,990	946	1,009	851	228	266	712	1,313	1,441	1,321	12,626
Synodus foetens	0.3	*	0.1	0.9	1.9	2.8	1.2	2.5	0.8	2.9	6.2	1.7	1.6
	*	*	*	0.1	0.2	0.4	0.1	0.2	*	0.1	0.2	0.1	0.1
	10	1	2	34	52	68	65	118	38	115	196	69	768
Trachinocephalus myops									0.1				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									6				6

Table 7.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	36.5 1.7 1,242	0.8 0.1 44	3.0 0.4 114	4.7 0.6 178	34.8 3.9 974	4.8 0.7 115	11.4 0.9 595	20.1 1.3 966	259.1 8.2 11,726	98.2 3.6 3,880	99.2 3.6 3,125	16.8 0.6 681	50.1 2.9 23,640
Galeichthys felis	2.4 0.1 82	-	4.8 0.6 180	13.2 1.7 506	6.0 0.7 168	4.8 0.7 116	19.8 1.6 1,032	37.3 2.4 1,793	52.6 1.7 2,382	34.8 1.3 1,376	23.5 0.8 740	3.0 0.1 122	18.0 1.0 8,497
Ophichthus spp.	-	* * 2	-	* * 1	-	-	-	-	-	-	-	* * 1	* * 4
Urophycis spp.	3.9 0.2 133	46.8 3.9 2,515	102.2 12.4 3,831	52.6 6.9 2,013	1.1 0.1 32	0.1 * 2	-	-	-	-	-	0.1 * 2	18.1 1.0 8,528
Fistularia tabacaria	-	-	-	-	-	-	-	-	* * 2	-	-	-	* * 2
Hippocampus spp.	* * 1	-	* * 1	-	-	-	* * 1	-	-	-	-	-	* * 3
Syngnathus spp.	-	* * 2	* * 1	-	-	-	-	0.1 * 5	-	-	-	-	* * 8
Centropristis striatus	0.1 * 2	0.3 * 18	0.5 0.1 18	0.4 0.1 15	0.4 * 10	-	0.4 * 20	3.8 0.2 181	0.5 * 24	0.4 * 16	0.5 * 16	0.2 * 7	0.7 * 327
Centropristis philadelphicus	4.1 0.2 141	0.5 * 27	2.8 0.3 104	0.4 0.1 16	1.0 0.1 27	0.4 0.1 10	10.8 0.9 562	19.9 1.3 957	11.4 0.4 518	10.5 0.4 415	13.9 0.5 437	8.0 0.3 326	7.5 0.4 3,540
Diplectrum formosum	-	-	0.1 * 2	-	1.0 0.1 28	0.2 * 4	0.4 * 20	1.0 0.1 48	5.7 0.2 260	-	0.1 * 2	-	0.8 * 364
Lobotes surinamensis	-	-	-	-	* * 1	* * 1	-	-	-	-	-	-	* * 2
Pomatomus saltatrix	0.4 * 12	0.1 * 6	0.9 0.1 32	0.2 * 6	0.3 * 8	0.7 0.1 17	-	-	0.1 * 4	* * 1	2.4 0.1 77	2.1 0.1 84	0.5 * 247
Rachycentron canadum	-	-	-	-	-	-	-	-	-	-	-	-	-
Caranx crysos	0.5 * 16	-	0.1 * 2	-	0.1 * 3	0.4 0.1 9	1.0 0.1 50	3.3 0.2 157	4.5 0.1 202	1.0 * 40	0.3 * 8	0.4 * 18	1.1 0.1 505
Caranx spp.	0.3 * 9	-	-	-	-	-	-	-	* * 2	-	-	-	* * 11
Chloroscombrus chrysurus	153.4 7.1 5,215	30.2 2.5 1,623	11.4 1.4 429	9.0 1.2 346	26.0 2.9 728	90.4 12.9 2,170	91.4 7.5 4,755	150.3 9.8 7,217	256.8 8.1 11,620	154.0 5.7 6,081	170.0 6.1 5,350	256.1 9.3 10,372	118.4 6.8 55,906
Decapterus punctatus	-	-	-	-	-	-	* * 1	-	-	-	-	-	* * 1
Selene vomer	3.1 0.1 104	0.1 * 3	-	-	-	1.3 0.2 31	3.4 0.3 175	4.5 0.3 217	0.7 * 32	2.0 0.1 79	2.6 0.1 83	0.9 * 36	1.6 0.1 760
Trachinotus spp.	0.1 * 4	-	-	-	0.1 * 3	-	0.3 * 17	2.1 0.1 102	* * 2	0.2 * 9	0.2 * 5	-	0.3 * 142
Trachurus lathami	-	-	-	-	-	-	0.1 * 5	-	-	-	-	-	* * 5
Vomer setapinnis	33.8 1.6 1,148	2.1 0.2 115	4.5 0.5 169	1.2 0.2 44	2.1 0.2 60	2.1 0.3 51	0.5 * 25	7.8 0.5 375	25.8 0.8 1,167	67.2 2.5 2,654	119.6 4.3 3,768	153.1 5.6 6,201	33.4 1.9 15,777
Eucinostomus spp.	-	-	* * 1	0.1 * 2	0.6 0.1 17	-	0.4 * 19	0.4 * 17	0.6 * 26	0.3 * 11	1.8 0.1 58	0.9 * 35	0.4 * 186

Table 7.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
							0.2						*
Haemulon aurolineatum	-	-	-	-	-	-	*	-	-	-	-	-	*
							12						12
	2.1	*	1.0	0.2	0.5	0.1	0.5	3.0	9.1	4.9	1.3	0.2	2.0
Orthopristis chrysopterus	0.1	*	0.1	*	0.1	*	*	0.2	0.3	0.2	0.1	*	0.1
	72	2	36	6	13	3	25	142	410	194	40	9	952
	6.1	5.7	1.9	5.4	4.4	2.5	3.8	3.7	2.8	5.4	11.6	17.4	5.8
Bairdiella chrysura	0.3	0.5	0.2	0.7	0.5	0.4	0.3	0.2	0.1	0.2	0.4	0.6	0.3
	208	307	73	207	124	60	196	176	127	214	364	703	2,759
	0.1	0.1				*	0.4	0.1	0.2		*	0.1	0.1
Cynoscion nebulosus	*	*	-	-	-	*	*	*	*	-	*	*	*
	4	5				1	21	6	10		1	6	54
	79.0	17.1	26.3	91.3	8.7	16.3	29.0	103.2	161.6	49.7	136.2	137.8	72.7
Cynoscion nothus	3.6	1.4	3.2	11.9	1.0	2.3	2.4	6.7	5.1	1.8	4.9	5.0	4.2
	2,686	918	987	3,494	244	391	1,508	4,956	7,314	1,961	4,290	5,581	34,330
	182.3	40.2	10.5	37.4	23.8	12.2	41.2	43.6	77.6	68.9	79.8	120.6	61.4
Cynoscion regalis	8.4	3.4	1.3	4.9	2.7	1.8	3.4	2.8	2.5	2.5	2.9	4.4	3.5
	6,197	2,161	393	1,430	666	292	2,143	2,093	3,511	2,722	2,513	4,885	29,006
						*							*
Equetus acuminatus	-	-	-	-	-	*	-	-	-	-	-	-	*
						1							1
						*	0.1						*
Equetus lanceolatus	-	-	-	-	-	*	*	-	-	-	-	-	*
						1	4						5
	24.4	7.5	7.8	18.1	17.4	13.0	15.5	40.3	58.3	32.2	93.8	24.1	28.8
Larimus fasciatus	1.1	0.6	0.9	2.4	1.9	1.9	1.3	2.6	1.9	1.2	3.4	0.9	1.6
	831	405	292	694	488	311	804	1,934	2,637	1,270	2,953	975	13,594
	342.4	342.2	131.5	25.3	163.2	22.4	100.6	82.4	56.7	50.4	69.9	539.2	167.0
Leiostomus xanthurus	15.8	28.7	15.9	3.3	18.1	3.1	8.3	5.4	1.8	1.9	2.5	19.6	9.5
	11,641	18,398	4,933	967	4,571	537	5,229	3,954	2,567	1,992	2,202	21,840	78,831
	185.2	116.0	61.5	106.5	20.1	14.6	39.4	55.1	143.3	275.9	256.7	157.1	119.3
Menticirrhus spp.	8.5	9.7	7.4	13.9	2.2	2.1	3.2	3.6	4.5	10.1	9.2	5.7	6.8
(largely americanus)	6,298	6,233	2,306	4,076	563	351	2,050	2,643	6,482	10,897	8,086	6,362	56,347
	111.4	7.0	4.7	4.7	27.4	76.3	221.4	391.6	689.3	306.3	366.3	162.9	209.3
Micropogon undulatus	5.1	0.6	0.6	0.6	3.0	10.9	18.1	25.4	21.8	11.2	13.2	5.9	11.9
	3,789	378	178	178	767	1,832	11,515	18,801	31,192	12,097	11,536	6,598	98,861
		*	*	0.1						0.1	0.1	0.2	*
Pogonias cromis	-	*	*	*	-	-	-	-	-	*	*	*	*
		1	1	2						3	2	7	16
	707.2	224.3	244.2	261.9	316.9	277.5	495.8	446.3	1,117.7	1,351.2	1,103.2	837.3	615.4
Stellifer lanceolatus	32.5	18.8	29.5	34.1	35.2	39.6	40.7	29.0	35.4	49.6	39.5	30.4	35.1
	24,047	12,057	9,155	10,021	8,875	6,659	25,782	21,428	50,575	53,363	34,747	33,912	290,621
					0.1								*
Mullus auratus	-	-	-	-	*	-	-	-	-	-	-	-	*
					2								2
	0.4	0.6	0.1	0.1	27.3	2.7	9.5	1.1	0.2	1.0	2.1	1.4	3.4
Lagodon rhomboides	*	0.1	*	*	3.0	0.4	0.8	0.1	*	*	0.1	0.1	0.2
	15	30	4	4	764	64	493	55	8	38	67	57	1,599
	0.1											0.1	*
Stenotomus spp.	*	-	-	-	-	-	-	-	-	-	-	*	*
	4											6	10
	3.8	2.9	1.6	1.5	1.1	0.7	0.6	15.2	20.2	14.2	16.8	17.0	8.3
Chaetodipterus faber	0.2	0.2	0.2	0.2	0.1	0.1	0.1	1.0	0.6	0.5	0.6	0.6	0.5
	128	154	60	56	32	16	32	731	913	560	529	690	3,901
				0.6	4.4	1.5	1.5	2.3	5.0		0.1		1.3
Xyrichthys spp.	-	-	-	0.1	0.5	0.2	0.1	0.2	0.2	-	*	-	0.1
				24	124	37	76	109	228		2		600
	25.8	21.3	19.6	15.7	29.2	22.5	39.6	33.4	18.8	7.3	22.1	53.9	26.3
Trichiurus lepturus	1.2	1.8	2.4	2.1	3.3	3.2	3.3	2.2	0.6	0.3	0.8	2.0	1.5
	877	1,147	734	602	819	540	2,059	1,602	849	288	695	2,185	12,397
		*			*		*	0.1	0.2	0.3	0.7		0.1
Scomberomorus maculatus	-	*	-	-	*	-	*	*	*	*	*	-	*
		2			1		2	6	8	12	21		52
					*		*						*
Gobionellus oceanicus	-	-	-	-	*	-	*	-	-	-	-	-	*
					1		1						2

Table 7.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
									*		0.1	*	*
Scorpaena spp.	-	-	-	-	-	-	-	-	*	-	*	*	*
									2		2	1	5
	4.0	3.6	1.1	6.3	2.8	19.1	9.2	13.2	5.8	8.3	9.1	7.9	7.3
Prionotus spp.	0.2	0.2	0.1	0.9	0.3	2.7	0.8	0.8	0.1	0.4	0.4	0.2	0.4
	137	190	39	241	78	458	476	634	262	325	288	319	3,447
	0.6	0.1		0.1	0.2	0.4			0.2		0.1	0.5	0.2
Astroscopus y-graecum	*	*	-	*	*	0.1	-	-	*	-	*	*	*
	20	6		5	6	9			7		4	19	76
		*	0.1	0.1	*						*		*
Hypsoblennius spp.	-	*	*	*	*	-	-	-	-	-	*	-	*
		1	4	2	1						1		9
	*			*		*					0.1	0.2	*
Rissola marginata	*	-	-	*	-	*	-	-	-	-	*	*	*
	1			1		1					3	7	13
	12.9	13.7	8.2	8.7	13.3	11.2	3.6	6.9	9.1	10.8	9.0	28.1	11.1
Peprilus alepidotus	0.6	1.2	1.0	1.1	1.5	1.6	0.3	0.5	0.3	0.4	0.3	1.0	0.6
	438	736	308	333	373	269	189	333	412	428	283	1,138	5,240
	9.4	15.2	20.6	21.7	43.6	19.5	2.4	4.2	27.1	5.2	9.7	22.0	15.6
Poronotus triacanthus	0.4	1.3	2.5	2.8	4.9	2.8	0.2	0.3	0.9	0.2	0.4	0.8	0.9
	318	816	773	830	1,221	468	124	200	1,225	204	307	893	7,379
	*							*	*	0.1	0.1		*
Sphyraena spp.	*	-	-	-	-	-	-	*	*	*	*	-	*
(largely guachancho)	1							1	1	4	2		9
											0.3	*	*
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	*	*	*
											10	1	11
Polydactylus octonemus	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.0	0.7	0.2	0.6	2.4	3.1	0.7	0.9	0.5	0.2	0.4	0.1	0.8
Ancylopsetta quadrocellata	*	0.1	*	0.1	0.3	0.4	0.1	0.1	*	*	*	*	*
	35	39	7	24	66	74	37	45	21	6	12	6	372
	0.6	0.3	0.1	*	1.4	1.4	3.2	1.4	1.8	1.3	1.8	3.3	1.4
Citharichthys spp.	*	*	*	*	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1
(largely spilopterus)	22	16	4	1	38	34	169	66	82	53	56	135	676
	59.9	37.8	19.0	5.9	4.0	1.0	7.3	6.6	33.0	35.9	46.7	48.2	25.8
Etropus crossotus	2.8	3.2	2.3	0.8	0.5	0.1	0.6	0.4	1.0	1.3	1.7	1.8	1.5
	2,038	2,034	712	224	113	23	379	317	1,493	1,419	1,470	1,951	12,173
	0.9	0.9	0.5	0.4	0.4	1.0	3.4	1.7	1.2	2.2	2.1	2.8	1.6
Paralichthys dentatus	*	0.1	0.1	0.1	*	0.1	0.3	0.1	*	0.1	0.1	0.1	0.1
	31	50	18	15	11	23	179	84	55	87	65	115	733
		0.1								0.1	0.2	0.1	*
Paralichthys lethostigma	-	*	-	-	-	-	-	-	-	*	*	*	*
		8								2	6	5	21
	1.2	2.9	6.1	9.3	21.2	2.1	2.0	0.2	0.4	2.6	3.4	1.4	3.9
Scophthalmus aquosus	0.1	0.2	0.7	1.2	2.4	0.3	0.2	*	*	0.1	0.1	0.1	0.2
	41	156	228	355	595	50	105	10	18	102	107	58	1,825
						0.3		0.4	0.8				0.1
Syacium spp.	-	-	-	-	-	*	-	*	*	-	-	-	*
						6		19	36				61
						0.1		0.1					*
Bothus ocellatus	-	-	-	-	-	*	-	*	-	-	-	-	*
						2		4					6
	8.5	3.4	1.8	12.9	5.6	2.6	23.8	14.3	36.5	50.4	31.8	21.2	18.4
Trinectes maculatus	0.4	0.3	0.2	1.7	0.6	0.4	2.0	0.9	1.1	1.9	1.1	0.8	1.1
	289	182	68	494	158	62	1,237	686	1,650	1,992	1,003	857	8,678
	13.1	9.3	9.5	10.4	4.7	0.4	4.0	1.2	6.0	20.0	16.3	30.4	10.4
Symphurus spp.	0.6	0.8	1.2	1.4	0.5	0.1	0.3	0.1	0.2	0.7	0.6	1.1	0.6
(largely plagiusa)	444	501	356	399	132	10	210	57	273	788	513	1,233	4,916
					*		*		*				*
Echeneis naucrates	-	-	-	-	*	-	*	-	*	-	-	-	*
					1		1		1				3
					*		*		0.1				*
Balistes spp.	-	-	-	-	*	-	*	-	*	-	-	-	*
					1		1		4				6

Table 7.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
			0.1	0.1	0.1	0.1	0.1		0.2				*
Alutera schoepfii	-	-	*	*	*	*	*	-	*	-	-	-	*
			3	2	3	3	4		8				23
				0.1	3.8	0.2	0.5	2.0	29.9	0.2	0.1		3.4
Stephanolepis spp.	-	-	-	*	0.4	*	*	0.1	1.0	*	*	-	0.2
				5	107	5	26	96	1,354	8	4		1,605
					0.1								*
Acanthostracion spp.	-	-	-	-	*	-	-	-	-	-	-	-	*
(largely quadricornis)					2								2
					*		0.1	*					*
Lagocephalus laevigatus	-	-	-	-	*	-	*	*	-	-	-	-	*
					1		3	1					5
			*		*		*	*			0.1	0.1	*
Sphaeroides spp.	-	-	*	-	*	-	*	*	-	-	*	*	*
			1		1		1	1			2	4	10
	1.1	0.1	0.2	0.7	0.3	0.2	0.4	0.3	0.6	1.8	1.3	1.0	0.6
Chilomycterus schoepfi	0.1	*	*	0.1	*	*	*	*	*	0.1	0.1	*	*
	39	5	9	26	8	4	19	16	28	72	40	40	306
				0.3									*
Opsanus tau	-	-	-	*	-	-	-	-	-	-	-	-	*
				11									11
								*	0.3			0.1	*
Porichthys porosissimus	-	-	-	-	-	-	-	*	*	-	-	*	*
								1	12			2	15
	*								0.3	0.3	0.5	0.2	0.1
Ogcocephalus spp.	*	-	-	-	-	-	-	-	*	*	*	*	*
(largely vespertilio)	1								15	11	16	10	53
	2,173.9	1,192.5	827.6	767.8	900.4	701.2	1,217.9	1,539.9	3,158.2	2,724.3	2,795.1	2,752.0	1,752.5
Total	100.0	99.9	99.9	100.2	100.0	99.9	99.8	99.9	99.7	100.0	100.4	100.0	99.7
	73,915	64,135	31,028	29,377	25,227	16,825	63,346	73,943	142,921	107,588	88,025	111,437	827,767

Table 8.--Fish taken by trawling, All Areas Combined (South Carolina Outside, Georgia Inside and Outside, and Florida Outside), M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by months for all years and stations combined

[Upper figure, number of fish per hour of hauling; middle figure, percent of total catch; and lower figure, total number of fish; asterisk indicates value less than 0.05]

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Carcharhinus spp.		*		*		0.2	0.1	0.1	*	*		0.1	0.1
	-	*	-	*	-	*	*	*	*	*	-	*	*
		1		3		16	5	11	2	2		4	44
Scoliodon terraenovae	*			*	0.6	3.5	2.4	0.4	0.1	0.6	*	0.1	0.6
	*	-	-	*	0.1	0.3	0.2	*	*	*	*	*	*
	2			3	47	229	199	41	5	44	2	3	575
Sphyrna tiburo	0.9	0.1	0.1	0.9	0.7	1.2	0.3	0.3	0.9	1.1	3.5	1.0	0.8
	0.1	*	*	0.1	0.1	0.1	*	*	*	0.1	0.1	*	0.1
	50	10	6	85	57	81	26	30	90	77	164	62	738
Sphyrna zygaena	*		0.1		0.1	0.9	1.2	0.5	0.3	0.1	0.2	0.1	0.3
	*	-	*	-	*	0.1	0.1	*	*	*	*	*	*
	2		6		4	60	101	50	28	9	9	3	272
Pristis pectinatus									*				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									1				1
Rhinobatos lentiginosus					*	*		0.1	*				*
	-	-	-	-	*	*	-	*	*	-	-	-	*
					1	2		8	2				13
Torpedo nobiliana	*		0.1				*	*	0.1	0.1			*
	*	-	*	-	-	-	*	*	*	*	-	-	*
	2		5				1	1	7	6			22
Raja eglanteria	4.4	1.8	1.1	1.3	0.4		0.1	*	0.7	3.1	3.7	9.7	1.9
	0.2	0.2	0.1	0.1	*	-	*	*	*	0.1	0.1	0.4	0.1
	239	143	91	125	29		11	3	69	225	174	579	1,688
Dasyatis americana	0.1	0.2	0.1	2.5	0.5	0.5	2.6	0.7	0.6	0.7	1.1	0.5	0.9
	*	*	*	0.2	0.1	*	0.2	*	*	*	*	*	0.1
	8	12	11	245	40	31	217	64	47	49	52	29	805
Dasyatis centroura			0.1	*									*
	-	-	*	*	-	-	-	-	-	-	-	-	*
			7	4									11
Dasyatis sabina	2.0	0.8	0.7	3.5	5.0	4.3	1.5	2.8	2.1	3.1	4.3	13.7	3.4
	0.1	0.1	0.1	0.3	0.5	0.4	0.1	0.2	0.1	0.1	0.2	0.5	0.2
	106	65	55	339	388	279	123	263	207	223	203	816	3,067
Gymnura micrura	0.1	*	*	0.6	1.6	1.0	1.8	0.6	0.8	0.7	0.4	0.2	0.7
	*	*	*	0.1	0.2	0.1	0.1	*	*	*	*	*	*
	6	2	1	53	122	65	152	61	76	52	17	9	616
Aetobatus narinari		0.1		*			*				*	0.1	*
	-	*	-	*	-	-	*	-	-	-	*	*	*
		9		3			1				1	5	19
Rhinoptera bonasus	*	0.4	1.5	0.2	0.9	0.3	0.4	0.1	0.3	0.2		0.1	0.4
	*	*	0.2	*	0.1	*	*	*	*	*	-	*	*
	1	29	118	18	72	20	37	10	31	12		4	352
Acipenser oxyrhynchus		*										0.1	*
	-	*	-	-	-	-	-	-	-	-	-	*	*
		2										8	10
Lepisosteus osseus			*	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-	-	*	*	*	*	*	*	*	*	*	*	*
			2	25	18	9	9	11	8	6	4	5	97
Brevoortia spp.	93.9	157.6	44.4	7.8	18.3	16.1	4.7	1.7	0.5	1.1	1.5	7.9	28.3
	4.9	16.3	4.7	0.7	1.8	1.5	0.3	0.1	*	0.1	0.1	0.3	1.7
(tyrannus and smithi)	5,049	12,608	3,552	752	1,420	1,053	387	161	48	80	70	475	25,655
Opisthonema oglinum	10.4	1.7	*	0.1	0.1	1.5	0.2	0.1		0.1		0.5	1.0
	0.5	0.2	*	*	*	0.1	*	*	-	*	-	*	0.1
	560	132	1	11	5	99	18	11		8		28	873
All other genera and species of herrings	0.7	0.7	0.3		0.4	0.1	*	*	0.4	0.1	1.5	0.4	0.3
	*	0.1	*	-	*	*	*	*	*	*	0.1	*	*
	39	52	22		32	4	2	2	42	5	68	22	290
Anchoa spp. (largely	33.7	25.4	43.4	53.5	37.0	32.8	6.1	6.0	16.1	62.0	88.4	45.6	34.7
	1.7	2.6	4.6	4.5	3.6	3.0	0.4	0.4	0.7	2.9	3.2	1.7	2.1
mitchilli and hepsetus)	1,810	2,029	3,474	5,150	2,880	2,150	523	565	1,577	4,497	4,134	2,725	31,514
Synodus foetens	0.3	*	*	0.4	0.7	1.1	0.9	1.3	0.4	1.6	4.3	1.2	0.9
	*	*	*	*	0.1	0.1	0.1	0.1	*	0.1	0.2	*	0.1
	18	1	2	34	52	74	73	118	39	117	200	70	798
Trachinocephalus myops									0.1				*
	-	-	-	-	-	-	-	-	*	-	-	-	*
									6				6

Table 8.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bagre marinus	23.1 1.2 1,242	0.6 0.1 44	1.5 0.2 117	5.3 0.5 513	27.4 2.7 2,130	31.0 2.8 2,032	17.1 1.1 1,423	60.9 3.6 5,722	178.3 8.0 17,515	77.3 3.5 5,604	69.3 2.5 3,238	11.5 0.4 687	44.4 2.7 40,267
Galeichthys felis	1.8 0.1 98	* * 1	2.4 0.3 195	36.6 3.1 3,523	58.1 5.9 4,519	74.3 6.8 4,865	46.2 2.9 3,837	93.8 5.6 8,817	45.9 2.1 4,511	26.8 1.2 1,944	18.1 0.7 845	2.0 0.1 122	36.7 2.2 33,277
Ophichthus spp.	- 	* * 2	- 	* * 1	- 	- 	- 	* * 1	* * 1	- 	- 	* * 1	* * 6
Urophycis spp.	3.4 0.2 182	61.7 6.4 4,932	136.7 14.6 10,939	37.3 3.2 3,586	1.4 0.1 108	* * 2	- 	- 	- 	- 	- 	* * 2	21.8 1.3 19,751
Fistularia tabacaria	- 	- 	- 	- 	- 	- 	- 	- 	* * 2	- 	- 	- 	* * 2
Hippocampus spp.	* * 1	- 	* * 1	- 	- 	- 	* * 1	- 	- 	- 	- 	- 	* * 3
Syngnathus spp.	* * 2	0.1 * 5	* * 1	- 	- 	- 	- 	0.1 * 5	- 	- 	- 	* * 1	* * 14
Centropristis striatus	1.1 * 59	0.3 * 25	0.3 * 22	0.8 0.1 73	0.4 * 32	0.3 * 17	0.2 * 20	1.9 0.1 181	0.3 * 31	0.5 * 35	0.4 * 20	0.2 * 11	0.6 * 526
Centropristis philadelphicus	2.7 0.1 146	0.5 0.1 38	1.4 0.2 110	0.2 * 24	0.4 * 29	0.2 * 10	6.8 0.4 562	10.2 0.6 959	5.6 0.3 547	7.0 0.3 507	10.2 0.4 479	5.9 0.2 353	4.1 0.3 3,764
Diplectrum formosum	- 	- 	* * 2	- 	0.4 * 28	0.1 * 4	0.2 * 20	0.5 * 48	2.6 0.1 260	- 	* * 2	- 	0.4 * 364
Lobotes surinamensis	- 	- 	- 	* * 1	* * 2	* * 2	* * 3	* * 1	- 	- 	- 	- 	* * 9
Pomatomus saltatrix	1.9 0.1 100	1.7 0.2 135	0.7 0.1 55	0.2 * 21	1.3 0.1 103	0.4 * 28	0.1 * 5	* * 2	* * 4	0.1 * 7	1.9 0.1 88	2.2 0.1 133	0.8 0.1 681
Rachycentron canadum	- 	- 	- 	- 	- 	- 	- 	- 	- 	* * 1	- 	- 	* * 1
Caranx crysos	0.3 * 16	- 	* * 2	* * 1	* * 3	0.2 * 13	0.7 * 56	2.2 0.1 206	2.3 0.1 222	0.8 * 60	0.2 * 8	0.3 * 18	0.7 * 605
Caranx spp.	0.2 * 9	- 	- 	- 	- 	- 	- 	- 	* * 2	- 	- 	- 	* * 11
Chloroscombrus chrysurus	101.9 5.3 5,475	22.9 2.4 1,830	7.0 0.8 559	3.7 0.3 360	19.2 1.9 1,495	44.0 4.0 2,881	63.3 4.0 5,254	91.6 5.4 8,613	128.0 5.8 12,580	92.4 4.1 6,699	119.9 4.3 5,607	182.0 6.7 10,872	68.6 4.2 62,225
Decapterus punctatus	- 	- 	- 	- 	- 	- 	* * 1	- 	- 	- 	- 	- 	* * 1
Selene vomer	2.2 0.1 118	0.2 * 16	- 	* * 1	* * 1	2.4 0.2 160	4.1 0.3 342	3.6 0.2 336	2.4 0.1 236	7.9 0.4 570	3.1 0.1 146	0.9 * 52	2.2 0.1 1,978
Trachinotus spp.	0.1 * 4	- 	- 	- 	0.1 * 4	- 	0.2 * 18	1.1 0.1 106	* * 2	0.1 * 9	0.1 * 5	- 	0.2 * 148
Trachurus lathami	- 	- 	- 	- 	- 	- 	0.1 * 5	- 	- 	- 	- 	- 	* * 5
Vomer setapinnis	21.4 1.1 1,148	1.4 0.2 115	2.1 0.2 170	0.5 * 44	2.0 0.2 155	0.8 0.1 52	0.4 * 33	4.7 0.3 446	14.0 0.6 1,376	38.9 1.7 2,823	81.3 2.9 3,800	103.8 3.8 6,204	18.0 1.1 16,366
Eucinostomus spp.	- 	- 	* * 1	* * 2	0.2 * 17	- 	0.2 * 19	0.2 * 19	0.3 * 32	0.2 * 13	1.3 0.1 61	0.6 * 37	0.2 * 201

Table 8.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Haemulon aurolineatum	-	-	-	-	-	-	0.1 * 12	-	-	-	-	-	* * 12
Orthopristis chrysopterus	1.3 0.1 72	* * 2	0.5 0.1 36	0.1 * 7	0.2 * 13	* * 3	1.5 0.1 128	1.8 0.1 168	4.4 0.2 437	2.7 0.1 194	0.9 * 40	0.2 * 9	1.2 0.1 1,109
Bairdiella chrysura	10.5 0.5 563	4.7 0.5 378	4.4 0.5 349	16.3 1.4 1,566	9.4 0.9 732	4.8 0.4 314	5.3 0.3 442	3.8 0.2 360	5.4 0.2 530	10.8 0.5 783	9.7 0.4 453	17.5 0.6 1,048	8.3 0.5 7,518
Cynoscion nebulosus	0.3 * 17	0.1 * 8	* * 2	0.1 * 10	0.5 * 35	0.6 0.1 38	0.8 0.1 63	0.3 * 32	0.3 * 30	0.1 * 8	0.2 * 10	0.4 * 25	0.3 * 278
Cynoscion nothus	50.0 2.6 2,689	11.5 1.2 918	12.3 1.3 987	36.5 3.1 3,509	6.7 0.7 524	7.0 0.6 460	18.4 1.2 1,528	53.0 3.1 4,985	74.4 3.4 7,314	27.3 1.2 1,979	92.2 3.3 4,312	93.4 3.4 5,581	38.3 2.4 34,786
Cynoscion regalis	133.4 6.9 7,171	30.3 3.1 2,421	13.0 1.4 1,038	70.2 5.9 6,753	33.3 3.3 2,586	38.6 3.5 2,531	60.4 3.8 5,011	79.7 4.7 7,490	74.9 3.4 7,359	81.3 3.6 5,893	70.9 2.6 3,316	95.5 3.5 5,704	63.1 3.9 57,273
Equetus acuminatus	-	-	-	-	-	* * 1	-	-	-	-	-	-	* * 1
Equetus lanceolatus	-	-	-	-	-	* * 1	0.1 * 4	-	-	-	-	-	* * 5
Larimus fasciatus	16.3 0.8 874	5.1 0.5 409	4.0 0.4 322	7.7 0.7 737	6.4 0.6 498	4.8 0.4 314	9.8 0.6 815	21.1 1.2 1,980	27.0 1.2 2,655	17.8 0.8 1,289	63.3 2.3 2,957	16.4 0.6 980	15.2 0.9 13,830
Leiostomus xanthurus	282.8 14.6 15,200	237.7 24.6 19,014	202.3 21.6 16,183	237.1 20.0 22,819	83.0 8.1 6,454	59.3 5.4 3,882	126.4 8.0 10,488	55.5 3.3 5,221	39.0 1.8 3,833	36.5 1.6 2,646	56.1 2.0 2,621	377.8 13.8 22,572	144.3 8.8 130,933
Menticirrhus spp. (largely americanus)	170.8 8.8 9,178	89.0 9.2 7,117	47.3 5.1 3,784	60.1 5.1 5,780	12.0 1.2 933	12.6 1.2 826	31.4 2.0 2,604	39.7 2.4 3,734	77.2 3.5 7,588	169.6 7.6 12,297	197.9 7.2 9,253	133.8 4.9 7,994	78.3 4.8 71,088
Micropogon undulatus	76.2 4.0 4,097	5.6 0.6 450	4.7 0.5 373	15.2 1.3 1,466	79.7 7.8 6,201	224.8 20.5 14,725	306.8 19.5 25,468	353.1 20.9 33,188	377.5 17.0 37,087	189.0 8.5 13,701	252.9 9.2 11,822	111.6 4.1 6,668	171.1 10.5 155,246
Pogonias cromis	-	* * 1	* * 1	* * 2	-	-	-	-	* * 1	* * 3	0.1 * 4	0.1 * 7	* * 19
Stellifer lanceolatus	710.7 36.8 38,201	196.5 20.4 15,723	286.2 30.6 22,897	391.8 33.1 37,711	411.9 40.2 32,023	409.4 37.3 26,818	733.6 46.7 60,886	670.1 39.7 62,992	972.4 43.9 95,535	1,174.8 52.6 85,174	1,361.2 49.2 63,638	1,154.9 42.3 69,004	672.8 41.2 610,602
Mullus auratus	-	-	-	-	* * 2	-	-	-	-	-	-	-	* * 2
Lagodon rhomboides	0.3 * 16	0.4 * 30	0.1 * 4	0.1 * 5	9.8 1.0 764	1.0 0.1 67	6.2 0.4 514	0.6 * 57	0.1 * 8	0.5 * 38	1.4 0.1 67	1.0 * 57	1.8 0.1 1,627
Stenotomus spp.	0.1 * 4	-	-	-	-	-	-	-	-	-	-	0.1 * 6	* * 10
Chaetodipterus faber	2.4 0.1 128	1.9 0.2 154	0.8 0.1 62	0.9 0.1 88	6.4 0.6 495	6.5 0.5 425	1.7 0.1 138	18.8 1.1 1,766	15.3 0.7 1,505	9.5 0.4 686	11.5 0.4 537	11.5 0.4 690	7.4 0.5 6,674
Xyrichthys spp.	-	-	-	0.2 * 24	1.6 0.2 124	0.6 0.1 37	0.9 0.1 76	1.2 0.1 109	2.3 0.1 228	-	* * 2	-	0.7 * 600
Trichiurus lepturus	29.3 1.5 1,577	15.8 1.6 1,263	20.8 2.2 1,666	22.6 1.9 2,178	48.6 4.8 3,781	39.6 3.6 2,593	38.4 2.4 3,189	21.2 1.3 1,994	9.6 0.4 941	8.3 0.4 600	17.5 0.6 816	38.6 1.4 2,305	25.2 1.6 22,903
Scomberomorus maculatus	* * 2	0.1 * 5	-	* * 1	* * 1	-	* * 2	0.1 * 9	0.2 * 20	0.3 * 19	1.2 * 57	0.3 * 16	0.2 * 132
Gobionellus oceanicus	-	-	-	-	* * 2	-	* * 2	-	-	-	-	-	* * 4

Table 8.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
	*								*		*	*	*
Scorpaena spp.	*	-	-	-	-	-	-	-	*	-	*	*	*
	2								2		2	1	7
	4.1	2.9	3.0	10.5	8.0	8.8	6.2	6.8	2.8	4.9	6.6	6.5	5.9
Prionotus spp.	0.2	0.3	0.3	0.9	0.8	0.8	0.4	0.4	0.1	0.2	0.3	0.3	0.4
	217	227	234	1,006	621	580	516	639	269	352	309	388	5,358
	0.9	0.3	0.2	0.5	0.8	0.5	0.3	*	0.1	0.1	0.1	0.8	0.4
Astroscopus y-graecum	0.1	*	*	*	0.1	0.1	*	*	*	*	*	*	*
	48	26	19	48	62	36	24	4	8	4	4	49	332
	0.1	*	0.1	*	*		*				0.1		*
Hypsoblennius spp.	*	*	*	*	*	-	*	-	-	-	*	-	*
	3	1	6	2	1		1				3		17
	*			*		*					0.1	0.1	*
Rissola marginata	*	-	-	*	-	*	-	-	-	-	*	*	*
	1			4		2					3	7	17
	11.6	10.6	10.3	33.8	63.7	20.0	6.3	6.7	8.4	10.4	8.7	20.3	17.8
Peprilus alepidotus	0.6	1.1	1.1	2.9	6.2	1.8	0.4	0.4	0.4	0.5	0.3	0.7	1.1
	622	848	827	3,249	4,951	1,310	521	634	821	754	408	1,214	16,159
	7.5	11.1	12.5	13.0	22.0	9.5	1.6	3.3	20.3	7.8	7.8	17.3	11.4
Poronotus triacanthus	0.4	1.2	1.3	1.1	2.2	0.9	0.1	0.2	0.9	0.4	0.3	0.6	0.7
	405	938	1,000	1,255	1,712	621	130	306	1,994	566	366	1,035	10,328
	*					*		*	*	1.0	*		0.1
Sphyraena spp.	*	-	-	-	-	*	-	*	*	0.1	*	-	*
(largely guachancho)	1					2		1	1	75	2		82
											0.3	*	*
Mugil cephalus	-	-	-	-	-	-	-	-	-	-	*	*	*
											12	1	13
						*							*
Polydactylus octonemus	-	-	-	-	-	*	-	-	-	-	-	-	*
						1							1
	1.0	0.8	1.4	5.1	2.3	1.5	0.4	0.5	0.2	0.1	0.3	0.1	1.2
Ancylopsetta quadrocellata	0.1	0.1	0.2	0.4	0.2	0.1	*	*	*	*	*	*	0.1
	56	61	113	494	175	100	37	45	21	6	13	6	1,127
	0.4	0.2	0.1	*	0.6	1.4	2.8	1.1	1.1	0.7	1.2	2.3	1.0
Citharichthys spp.	*	*	*	*	0.1	0.1	0.2	0.1	0.1	*	*	0.1	0.1
(largely spilopterus)	23	16	7	1	44	94	230	100	106	54	56	135	866
	86.4	46.6	44.3	57.2	7.6	2.0	6.8	11.6	33.8	77.9	122.4	168.1	49.1
Etropus crossotus	4.5	4.8	4.7	4.8	0.8	0.2	0.4	0.7	1.5	3.5	4.4	6.2	3.0
	4,642	3,728	3,545	5,505	593	128	564	1,090	3,318	5,649	5,721	10,043	44,526
	1.5	1.2	1.2	1.6	3.8	4.3	7.6	2.4	2.1	3.3	2.1	3.0	2.8
Paralichthys dentatus	0.1	0.1	0.1	0.1	0.4	0.4	0.5	0.1	0.1	0.2	0.1	0.1	0.2
	82	94	96	157	295	280	630	221	209	236	96	182	2,578
	*	0.2	*							0.4	0.3	0.2	0.1
Paralichthys lethostigma	*	*	*	-	-	-	-	-	-	*	*	*	*
	2	15	1							29	15	13	75
	0.8	3.4	12.0	9.2	8.5	0.8	1.3	0.1	0.2	1.6	2.3	1.0	3.6
Scophthalmus aquosus	*	0.4	1.3	0.8	0.8	0.1	0.1	*	*	0.1	0.1	*	0.2
	42	269	958	888	664	50	105	10	18	119	109	60	3,292
						0.1		0.2	0.4				0.1
Syacium spp.	-	-	-	-	-	*	-	*	*	-	-	-	*
						6		19	36				61
						*		*					*
Bothus ocellatus	-	-	-	-	-	*	-	*	-	-	-	-	*
						2		4					6
	5.6	2.9	1.3	10.4	11.8	19.7	29.8	46.4	39.4	43.4	31.1	19.0	22.4
Trinectes maculatus	0.3	0.3	0.1	0.9	1.2	1.8	1.9	2.8	1.8	1.9	1.1	0.7	1.4
	300	228	106	1,004	919	1,290	2,476	4,365	3,867	3,143	1,452	1,136	20,286
	17.6	7.7	9.3	25.5	5.6	1.0	3.0	2.9	7.5	21.6	25.6	45.2	13.2
Symphurus spp.	0.9	0.8	1.0	2.2	0.5	0.1	0.2	0.2	0.3	1.0	0.9	1.7	0.8
(largely plagiusa)	948	614	742	2,450	432	66	252	275	732	1,564	1,196	2,699	11,970
					*	*	*		*				*
Echeneis naucrates	-	-	-	-	*	*	*	-	*	-	-	-	*
					3	1	1		1				6
					*		*		*				*
Balistes spp.	-	-	-	-	*	-	*	-	*	-	-	-	*
					1		1		4				6

Table 8.--Continued

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alutera schoepfii	-	-	*	*	*	0.1	0.1		0.1				*
			*	*	*	*	*	-	*	-	-	-	*
			3	2	3	3	4		8				23
Stephanolepis spp.	-	-	-	0.1	1.4	0.1	0.3	1.0	13.8	0.1	0.1		1.8
				*	0.1	*	*	0.1	0.6	*	*	-	0.1
				5	107	5	26	96	1,360	8	4		1,611
Acanthostracion spp. (largely quadricornis)	-	-	-	-	*	-	-	-	-	-	-	-	*
					*								*
					2								2
Lagocephalus laevigatus	-	-	-	-	*	-	0.1	0.1	-	-	-	-	*
					*		*	*					*
					1		4	7					12
Sphaeroides spp.	-	-	*	*	*	-	*	*	-	0.1	*	0.1	*
			*	*	*		*	*		*	*	*	*
			1	1	1		1	1		4	2	4	15
Chilomycterus schoepfi	1.5	0.2	0.3	0.9	0.4	0.3	0.7	0.6	1.0	2.9	3.1	1.9	1.0
	0.1	*	*	0.1	*	*	0.1	*	0.1	0.1	0.1	0.1	0.1
	78	12	23	89	28	21	61	56	101	213	144	112	938
Opsanus tau	0.3	*	*	1.0	0.2	0.1	0.3	0.1	*	0.1	0.1	0.1	0.2
	*	*	*	*	*	*	*	*	*	*	*	*	*
	14	3	2	98	17	6	27	7	3	9	4	8	198
Porichthys porosissimus	-	-	-	-	-	-	-	*	0.1			*	*
								*	*	-	-	*	*
								1	12			2	15
Ogcocephalus spp. (largely vespertilio)	*	-	-	-	-	-	-	-	0.2	0.2	0.7	0.2	0.1
	*								*	*	*	*	*
	1								15	13	34	10	73
Total	1,930.3	965.6	936.4	1,182.5	1,023.6	1,097.1	1,571.4	1,689.4	2,214.7	2,231.8	2,764.8	2,730.1	1,633.5
	99.7	99.9	100.0	100.0	100.3	99.7	99.8	99.9	99.6	99.9	100.0	99.7	100.0
	103,768	77,211	74,914	113,914	79,593	71,877	130,465	158,838	217,582	161,792	129,257	163,111	1,482,323

Table 9.--Fish taken by trawling, families representing one percent or more of the total catch for the region (all areas combined), M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by areas for all months and years combined, arranged in descending order of importance

[Upper figure, number of fish per hour of trawling; and lower figure, percent of total catch]

	All Areas Combined	South Carolina Outside	Georgia Inside	Georgia Outside	Georgia Combined	Florida Outside	South Carolina, Georgia, and Florida Outside Combined
Sciaenidae	1,191.7	1,730.9	1,096.1	983.3	1,048.9	1,962.7	1,279.8
	73.0	82.9	72.9	70.6	72.0	72.0	72.9
Carangidae	89.7	20.6	18.9	111.8	57.9	388.6	154.8
	5.4	1.1	1.3	8.0	4.0	14.4	8.9
Ariidae	81.1	44.2	95.1	47.1	75.0	153.4	68.1
	4.9	2.1	6.3	3.4	5.2	5.7	3.9
Bothidae	57.9	20.5	84.1	40.0	65.7	21.2	33.6
	3.6	0.9	5.5	2.9	4.5	0.7	1.9
Soleidae and Cynoglossidae	35.6	39.2	42.9	24.5	35.2	35.8	28.8
	2.2	1.8	2.9	1.8	2.4	1.3	1.7
Engraulidae	34.7	53.1	43.4	27.4	36.7	6.7	26.7
	2.1	2.5	2.9	2.0	2.5	0.3	1.5
Clupeidae	29.6	73.1	15.7	44.2	27.7	14.6	42.2
	1.8	3.5	1.0	3.1	1.9	0.6	2.4
Stromateidae	29.2	21.2	31.9	28.4	30.4	24.6	26.7
	1.8	1.0	2.2	2.1	2.1	1.0	1.5
Trichiuridae	25.2	11.5	24.1	27.8	25.7	30.6	26.3
	1.6	0.6	1.6	2.0	1.8	1.1	1.5
Gadidae	21.8	54.3	25.8	14.1	20.9	6.5	18.1
	1.3	2.6	1.7	1.0	1.4	0.2	1.0
Total	1,596.5	2,068.6	1,478.0	1,348.6	1,424.1	2,644.7	1,705.1
	97.7	99.0	98.3	96.9	97.8	97.3	97.2

Table 10.--Fish taken by trawling, species representing one percent or more of the total catch for the region (all areas combined), M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by areas for all months and years combined, arranged in descending order of importance

[Upper figure, number of fish per hour of trawling; and lower figure, percent of total catch]

	All Areas Combined	South Carolina Outside	Georgia Inside	Georgia Outside	Georgia Combined	Florida Outside	South Carolina, Georgia, and Florida Outside Combined
Stellifer lanceolatus	672.8 41.2	809.1 38.8	735.2 48.9	528.6 38.0	648.5 44.5	774.1 28.4	615.4 35.1
Micropogon undulatus	171.1 10.5	152.6 7.3	129.5 8.6	140.6 10.1	134.2 9.2	476.0 17.5	209.3 11.9
Leiostomus xanthurus	144.3 8.8	466.4 22.3	119.7 8.0	109.7 7.8	115.5 7.9	156.0 5.7	167.0 9.5
Menticirrhus spp.	78.3 4.8	100.8 4.8	33.9 2.3	99.1 7.1	61.2 4.2	198.9 7.3	119.3 6.8
Chloroscombrus chrysurus	68.6 4.2	11.6 0.6	14.5 1.0	93.1 6.7	47.5 3.3	274.8 10.1	118.4 6.8
Cynoscion regalis	63.1 3.9	141.4 6.8	64.9 4.3	49.6 3.6	58.6 4.0	46.2 1.7	61.4 3.5
Etropus crossotus	49.1 3.0	15.3 0.7	74.3 4.9	29.9 2.2	55.7 3.8	19.1 0.7	25.8 1.5
Bagre marinus	44.4 2.7	28.6 1.4	38.2 2.5	32.9 2.4	36.0 2.5	121.3 4.5	50.1 2.9
Cynoscion nothus	38.3 2.4	25.5 1.2	1.0 0.1	25.2 1.8	11.2 0.8	262.2 9.6	72.7 4.2
Galeichthys felis	36.7 2.2	15.6 0.7	56.9 3.8	14.2 1.0	39.0 2.7	32.1 1.2	18.0 1.0
Anchoa spp.	34.7 2.1	53.1 2.5	43.4 2.9	27.4 2.0	36.7 2.5	6.7 0.3	26.7 1.5
Brevoortia spp.	28.3 1.7	72.9 3.5	13.9 0.9	43.6 3.1	26.4 1.8	12.8 0.5	41.5 2.4
Trichiurus lepturus	25.2 1.6	11.5 0.6	24.1 1.6	27.8 2.0	25.7 1.8	30.6 1.1	26.3 1.5
Trinectes maculatus	22.4 1.4	19.4 0.9	26.7 1.8	14.6 1.1	21.6 1.5	30.2 1.1	18.4 1.1
Urophycis spp.	21.8 1.3	54.3 2.6	25.8 1.7	14.1 1.0	20.9 1.4	6.5 0.2	18.1 1.0
Vomer setapinnis	18.0 1.1	3.4 0.2	1.4 0.1	16.2 1.2	7.6 0.5	110.8 4.1	33.4 1.9
Peprilus alepidotus	17.8 1.1	2.0 0.1	25.1 1.7	11.8 0.9	19.5 1.3	14.9 0.6	11.1 0.6

Table 11.--Fish taken by trawling, families representing one percent or more of the total catch for the region (all areas combined), M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by areas and months for all years combined, arranged in descending order of importance

[Upper figure, number of fish per hour of hauling; and lower figure, percent of total catch; asterisk indicates value less than 0.05]

SCIAENIDAE	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
South Carolina Outside	3,206.8 86.8	1,432.4 74.5	267.0 29.0	233.3 42.2	901.6 61.8	683.4 63.3	1,759.0 88.5	1,584.6 87.6	3,008.5 90.2	2,470.4 85.7	1,129.6 91.1	3,383.3 94.7	1,730.9 82.9
Georgia Inside	1,128.7 74.6	212.5 42.6	649.9 62.9	1,022.2 70.2	477.0 62.0	951.3 71.7	1,872.8 86.5	1,391.1 75.5	1,085.2 77.0	1,189.4 72.5	2,078.1 76.9	2,011.1 74.9	1,096.1 72.9
Georgia Outside	811.4 65.3	563.6 55.5	319.8 54.2	496.9 72.6	599.4 65.8	431.5 62.2	783.3 70.7	951.2 71.8	1,907.2 71.3	1,572.9 80.7	1,550.6 72.2	1,764.3 78.1	983.3 70.6
Georgia Inside and Outside Combined	968.8 70.3	421.8 52.2	524.6 60.6	862.9 70.6	653.2 63.1	793.9 69.9	1,337.0 81.2	1,210.6 74.2	1,376.8 74.3	1,363.9 76.5	1,785.4 74.5	1,868.0 76.5	1,048.9 72.0
Florida Outside	2,569.4 76.2	1,172.9 79.3	1,421.3 81.5	1,078.1 82.8	135.9 51.9	206.2 55.9	834.4 82.5	1,602.5 78.4	3,063.1 68.2	4,130.0 73.3	4,211.2 76.9	1,824.2 48.6	1,962.7 72.0
CARANGIDAE													
South Carolina Outside	4.0 0.1	-	-	-	0.3 *	7.0 0.7	51.4 2.6	90.2 5.1	17.2 0.5	38.4 1.3	13.6 1.2	7.3 0.2	20.6 1.1
Georgia Inside	13.9 1.0	8.4 1.7	3.1 0.3	0.2 *	17.3 1.6	20.3 1.5	22.0 1.0	35.6 1.9	26.2 1.9	39.3 2.3	23.1 0.9	27.0 1.0	18.9 1.3
Georgia Outside	121.2 9.8	41.5 4.1	14.0 2.4	1.8 0.2	25.8 2.8	109.4 15.8	125.9 11.4	186.2 14.0	321.7 12.0	72.5 3.8	192.2 8.9	127.0 5.6	111.8 8.0
Georgia Inside and Outside Combined	67.9 4.9	28.1 3.4	7.2 0.8	0.7 *	19.9 1.9	47.2 4.1	73.1 4.4	97.5 5.9	131.3 7.2	54.3 3.1	116.9 4.8	84.8 3.4	57.9 4.0
Florida Outside	476.8 14.1	14.2 1.0	39.6 2.3	53.0 4.1	74.6 28.4	90.7 24.6	60.1 5.8	150.5 7.4	351.4 7.9	953.8 16.9	732.5 13.4	1,555.6 41.4	388.6 14.4
ARIIDAE													
South Carolina Outside	-	-	-	1.4 0.3	18.4 1.2	24.7 2.3	81.8 4.1	35.2 2.0	153.0 4.6	184.4 6.4	0.2 *	-	44.2 2.1
Georgia Inside	0.8 0.1	* *	0.4 *	57.8 4.0	110.7 10.1	160.6 12.1	117.2 5.4	256.1 13.9	149.4 10.7	69.4 4.3	14.3 0.6	0.3 *	95.1 6.3
Georgia Outside	2.0 0.2	-	0.2 *	21.9 3.2	49.4 5.4	8.4 1.2	29.0 2.7	68.3 5.2	171.7 6.5	97.1 4.9	113.4 5.3	3.5 0.2	47.1 3.4
Georgia Inside and Outside Combined	1.4 0.1	* *	0.3 *	46.9 3.9	91.9 8.9	114.5 10.1	73.9 4.5	179.0 11.0	157.2 8.5	82.0 4.6	69.4 2.8	2.2 0.1	75.0 5.2
Florida Outside	151.0 4.5	4.6 0.3	48.0 2.8	18.8 1.5	0.6 0.2	2.0 0.6	7.4 0.7	36.1 1.8	716.8 18.2	237.8 4.3	227.7 4.2	83.4 2.2	153.4 5.7
BOTHIDAE													
South Carolina Outside	17.0 0.4	13.1 0.7	42.9 4.6	7.1 1.3	9.3 0.6	3.3 0.3	11.2 0.6	11.8 0.6	67.6 2.0	20.8 0.7	12.2 1.0	18.4 0.5	20.5 0.9
Georgia Inside	135.8 9.0	71.6 14.5	88.3 8.4	110.8 7.7	19.0 1.7	10.7 0.9	22.5 1.1	20.5 1.1	37.8 2.6	134.0 8.2	281.6 10.4	424.4 15.8	84.1 5.5
Georgia Outside	93.5 7.5	51.4 5.0	23.0 3.9	19.0 2.9	35.3 3.9	10.7 1.6	21.2 2.0	8.5 0.6	31.1 1.0	49.1 2.6	72.0 3.3	79.7 3.5	40.0 2.9
Georgia Inside and Outside Combined	114.5 8.3	59.4 7.3	63.5 7.4	83.0 6.7	24.1 2.4	10.8 1.0	21.9 1.3	15.6 0.9	35.3 2.0	95.5 5.3	165.3 6.9	224.7 9.3	65.7 4.5
Florida Outside	24.1 0.7	25.8 1.7	21.8 1.2	14.2 1.2	6.0 2.3	2.7 0.8	10.6 1.1	19.7 1.0	39.0 0.8	30.9 0.7	37.8 0.6	6.8 0.2	21.2 0.7
SOLEIDAE AND CYNOGLOSSIDAE													
South Carolina Outside	49.5 1.3	16.3 0.9	48.9 5.2	30.1 5.4	31.7 2.2	6.0 0.6	28.0 1.4	16.0 0.9	58.3 1.8	76.4 2.7	32.0 2.6	64.4 1.8	39.2 1.8
Georgia Inside	26.1 1.7	6.1 1.3	10.0 1.0	44.2 3.0	21.3 2.0	30.9 2.3	41.4 2.0	84.7 4.6	50.5 3.6	58.4 3.5	74.2 2.8	90.7 3.3	42.9 2.9
Georgia Outside	20.5 1.7	12.0 1.2	4.4 0.8	18.5 2.7	8.9 1.0	2.7 0.4	31.8 2.9	10.8 0.8	25.5 0.9	57.8 2.9	42.9 2.0	59.1 2.6	24.5 1.8
Georgia Inside and Outside Combined	23.2 1.7	9.6 1.2	7.8 0.9	36.3 3.0	17.5 1.7	22.4 2.0	36.7 2.2	54.4 3.4	41.6 2.2	58.1 3.2	56.9 2.4	72.4 2.9	35.2 2.4
Florida Outside	6.1 0.2	13.3 0.9	6.7 0.3	35.7 2.8	-	1.3 0.4	19.1 1.9	28.7 1.4	82.8 1.9	115.4 2.0	72.0 1.3	19.9 0.5	35.8 1.3

Table 11.--Continued

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
ENGRAULIDAE													
South Carolina Outside	23.1 0.6	72.0 3.7	155.5 16.6	13.8 2.5	235.0 16.1	121.0 11.2	8.3 0.4	12.2 0.7	1.3 *	47.2 1.6	30.8 2.5	56.0 1.6	53.1 2.5
Georgia Inside	48.2 3.2	12.9 2.6	34.9 3.4	72.5 5.0	37.6 3.4	31.3 2.4	9.5 0.4	6.5 0.4	16.3 1.2	96.5 5.9	176.6 6.5	72.9 2.7	43.4 2.9
Georgia Outside	33.2 2.7	29.5 2.9	40.3 6.8	29.2 4.3	13.5 1.5	22.4 3.2	5.1 0.5	5.1 0.4	23.7 0.9	39.0 2.0	67.7 3.2	36.4 1.6	27.4 2.0
Georgia Inside and Outside Combined	40.6 3.0	22.8 2.8	36.9 4.3	59.4 4.9	30.2 2.9	28.6 2.5	7.3 0.4	5.9 0.4	18.9 1.0	70.4 3.9	116.2 4.9	51.8 2.1	36.7 2.5
Florida Outside	8.0 0.2	15.8 1.1	14.7 0.8	18.3 1.4	2.3 0.9	28.3 7.7	0.6 0.1	3.8 0.2	1.2 *	0.6 *	-	5.6 0.2	6.7 0.3
CLUPEIDAE													
South Carolina Outside	345.1 9.3	275.5 14.3	75.8 8.1	9.2 1.7	114.7 7.9	104.4 9.7	5.8 0.3	2.8 0.1	0.3 *	1.6 0.1	1.2 0.1	3.3 0.1	73.1 3.5
Georgia Inside	80.2 5.3	71.8 14.5	31.7 3.0	10.3 0.7	9.2 0.8	11.1 0.8	7.5 0.3	2.0 0.1	0.4 *	1.4 0.1	2.6 0.1	5.5 0.3	15.7 1.0
Georgia Outside	108.0 8.7	224.9 22.0	52.6 8.9	2.3 0.3	29.6 3.2	21.2 3.0	4.0 0.3	1.2 0.1	1.1 *	0.4 *	1.1 0.1	13.9 0.6	44.2 3.1
Georgia Inside and Outside Combined	94.2 6.8	163.1 20.2	39.6 4.6	7.9 0.6	15.5 1.4	14.2 1.2	5.8 0.3	1.8 0.1	0.7 *	1.0 0.1	1.8 0.1	10.3 0.4	27.7 1.9
Florida Outside	1.0 *	71.3 4.8	73.6 4.2	7.3 0.6	0.7 0.3	-	0.4 *	2.2 0.1	3.6 0.1	4.2 0.1	9.6 0.2	4.0 0.1	14.6 0.6
STROMATEIDAE													
South Carolina Outside	4.2 0.1	9.8 0.5	30.5 3.3	25.1 4.5	131.7 9.0	109.4 10.2	5.5 0.3	1.8 0.1	3.0 0.1	0.8 *	6.0 0.5	20.0 0.5	21.2 1.0
Georgia Inside	13.7 0.9	8.9 1.8	17.5 1.7	57.6 4.0	101.9 9.3	28.8 2.2	10.9 0.5	8.8 0.5	22.2 1.5	20.9 1.3	12.1 0.4	11.3 0.5	31.9 2.2
Georgia Outside	23.3 1.9	22.1 2.2	29.2 4.9	34.3 5.0	54.0 5.9	19.6 2.8	8.0 0.7	9.2 0.7	51.8 2.0	18.0 0.9	23.0 1.1	55.9 2.5	28.4 2.1
Georgia Inside and Outside Combined	18.5 1.3	16.8 2.0	22.0 2.5	50.5 4.1	87.2 8.4	26.0 2.3	9.5 0.6	9.0 0.5	32.8 1.8	19.6 1.1	18.1 0.7	37.1 1.5	30.4 2.1
Florida Outside	31.6 0.9	67.5 4.5	25.7 1.5	20.6 1.6	3.3 1.3	19.0 5.2	20.0 0.2	20.8 1.0	10.4 0.2	18.8 0.4	16.5 0.3	51.8 1.4	24.6 1.0
TRICHIURIDAE													
South Carolina Outside	10.5 0.3	28.4 1.5	1.5 0.2	4.2 0.8	13.0 0.9	15.7 1.5	19.8 1.0	25.2 1.4	4.0 0.1	14.4 0.5	2.0 0.2	1.5 *	11.5 0.6
Georgia Inside	35.4 2.3	4.4 0.9	21.9 2.1	27.2 1.9	59.5 5.5	49.5 3.7	36.5 1.7	8.5 0.5	1.7 0.1	9.5 0.6	7.9 0.3	6.2 0.2	24.1 1.6
Georgia Outside	13.5 1.1	16.2 1.6	25.1 4.2	19.2 2.8	35.5 3.9	26.8 3.9	56.3 5.1	39.2 3.0	16.0 0.6	1.6 0.1	23.6 1.1	59.4 2.6	27.8 2.0
Georgia Inside and Outside Combined	24.4 1.8	11.4 1.4	23.1 2.7	24.8 2.0	52.2 5.0	42.6 3.8	46.2 2.8	21.1 1.3	6.8 0.4	5.9 0.3	16.6 0.7	37.0 1.5	25.7 1.8
Florida Outside	64.7 1.9	38.4 2.6	12.3 0.7	13.8 1.1	-	3.3 0.9	15.2 1.5	20.2 1.0	35.8 0.8	24.6 0.4	31.5 0.6	70.8 1.9	30.6 1.1
GADIDAE													
South Carolina Outside	3.5 0.1	71.6 3.7	305.3 32.6	208.5 37.5	1.0 0.1	0.7 0.1	-	-	-	-	-	-	54.3 2.6
Georgia Inside	2.5 0.2	92.1 18.5	167.2 16.2	27.1 1.9	1.5 0.1	-	-	-	-	-	-	-	25.8 1.7
Georgia Outside	5.7 0.5	48.4 4.8	73.8 12.5	20.7 3.2	1.3 0.1	-	-	-	-	-	-	0.1 *	14.1 1.0
Georgia Inside and Outside Combined	4.1 0.3	66.0 8.2	131.8 15.2	25.2 2.1	1.5 0.1	-	-	-	-	-	-	* *	20.9 1.4
Florida Outside	0.1 *	25.8 1.7	39.0 2.2	20.9 1.6	-	-	-	-	-	-	-	-	6.5 0.2

Table 12.--Fish taken by trawling, species representing one percent or more of the total catch for the region (all areas combined), M/V Launch 58, 1931-35, catch per unit of effort (75-foot shrimp trawl at 2 to 3 knots) by areas and months for all years combined, arranged in descending order of importance

[Upper figure, number of fish per hour of hauling; and lower figure, percent of total catch; asterisk indicates value less than 0.05]

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Stellifer lanceolatus													
South Carolina Outside	782.5 21.2	145.1 7.5	89.5 10.0	154.8 27.9	777.3 53.3	540.7 50.0	1,052.6 52.9	1,047.2 57.8	2,481.3 74.3	1,638.4 56.8	512.0 41.3	277.3 7.8	809.1 38.8
Georgia Inside	716.7 47.4	139.7 28.0	323.3 31.3	477.4 32.8	265.3 42.6	485.8 36.6	1,132.4 52.3	903.6 49.0	848.3 60.2	964.0 58.7	1,894.5 70.1	1,823.0 67.9	735.2 48.9
Georgia Outside	357.1 28.7	138.4 13.6	119.6 20.2	322.6 47.1	297.4 32.6	277.6 40.1	501.4 45.2	397.5 30.0	805.5 30.2	1,090.4 55.8	1,045.6 48.7	1,117.8 49.5	528.6 38.0
Georgia Inside and Outside Combined	535.7 38.9	138.9 17.2	246.0 28.4	430.5 35.2	413.8 39.9	422.8 37.3	822.1 50.0	695.9 42.7	833.1 44.9	1,021.5 57.3	1,423.6 59.4	1,414.5 58.0	648.5 44.5
Florida Outside	1,482.6 43.9	620.7 42.0	925.5 53.0	133.7 10.3	- -	13.3 3.6	165.7 16.4	315.7 15.4	1,212.6 27.0	2,169.1 38.5	1,642.7 30.0	325.2 8.7	774.1 28.4
Micropogon undulatus													
South Carolina Outside	55.4 1.5	1.6 0.1	1.1 0.2	2.5 0.4	11.0 0.8	17.0 1.6	288.3 14.5	313.2 17.3	202.3 6.1	457.6 15.9	201.6 16.3	161.1 4.5	152.6 7.3
Georgia Inside	15.6 1.0	2.7 0.6	4.6 0.4	22.2 1.5	109.2 10.0	310.7 23.4	450.1 20.8	312.8 17.0	111.2 7.9	48.6 3.0	18.8 0.7	3.6 0.1	129.5 8.6
Georgia Outside	93.1 7.5	3.2 0.3	2.7 0.5	1.3 0.2	21.8 2.4	91.7 13.2	135.4 12.2	258.7 19.5	676.6 25.4	202.9 10.4	81.2 3.8	27.0 1.2	140.6 10.1
Georgia Inside and Outside Combined	54.6 4.0	3.0 0.4	3.9 0.4	15.9 1.3	82.4 8.0	244.4 21.5	295.3 17.9	290.6 17.8	312.3 16.8	118.8 6.7	53.4 2.2	17.2 0.7	134.2 9.2
Florida Outside	190.8 5.7	25.7 1.7	16.8 1.0	20.0 1.5	85.0 32.4	43.3 11.7	367.6 36.3	814.4 39.8	1,018.8 22.7	604.0 10.7	1,198.1 21.9	587.8 15.6	476.0 17.5
Leiostomus xanthurus													
South Carolina Outside	1,457.1 39.5	1,096.0 57.0	6.0 0.6	10.5 1.9	9.0 0.6	47.0 4.4	138.5 7.0	53.6 3.0	9.3 0.3	4.8 0.2	24.0 1.9	2,496.0 69.9	466.4 22.3
Georgia Inside	180.2 11.9	23.5 4.7	264.7 25.6	376.8 25.9	37.8 3.5	80.6 6.1	169.6 7.8	27.5 1.5	23.9 1.7	19.8 1.2	27.5 1.0	38.0 1.4	119.7 8.0
Georgia Outside	88.5 7.1	262.7 25.8	157.4 26.6	20.2 2.9	205.3 22.5	14.6 2.1	39.9 3.6	57.9 4.4	45.7 1.6	16.9 0.9	38.2 1.8	287.7 12.7	109.7 7.8
Georgia Inside and Outside Combined	134.0 9.7	166.1 20.5	224.0 25.9	268.6 22.0	89.2 8.6	60.6 5.3	105.9 6.4	40.0 2.5	30.9 1.7	18.5 1.0	33.4 1.4	182.6 7.5	115.5 7.9
Florida Outside	218.5 6.5	230.7 15.6	134.7 7.7	60.0 4.6	9.3 3.6	44.3 12.0	208.8 20.6	166.7 8.2	123.2 2.7	214.9 3.8	180.8 3.3	57.5 1.5	156.0 5.7
Menticirrhus spp.													
South Carolina Outside	120.2 3.3	129.8 6.8	155.5 16.6	45.4 8.2	22.3 1.5	10.7 1.0	111.3 5.6	52.0 2.9	163.3 4.9	129.6 4.5	68.4 5.5	119.6 3.4	100.8 4.8
Georgia Inside	145.8 9.7	33.7 6.8	34.8 3.4	29.4 2.0	7.4 0.7	11.4 0.9	17.9 0.8	23.7 1.3	20.9 1.5	42.4 2.6	76.5 2.8	84.8 3.2	33.9 2.3
Georgia Outside	202.8 16.3	109.5 10.8	28.8 4.9	85.7 12.5	22.1 2.4	17.5 2.5	25.5 2.3	53.8 4.1	90.3 3.4	180.7 9.3	230.6 10.7	175.7 7.8	99.1 7.1
Georgia Inside and Outside Combined	174.5 12.7	78.9 9.8	32.5 3.8	46.5 3.8	11.9 1.2	13.3 1.2	21.6 1.3	36.0 2.2	45.6 2.5	105.3 5.9	162.0 6.8	137.4 5.6	61.2 4.2
Florida Outside	186.0 5.5	134.2 9.1	116.8 6.7	248.4 19.1	3.3 1.3	1.3 0.4	28.1 2.8	60.3 3.0	286.0 6.4	754.3 13.4	448.3 8.2	123.3 3.3	198.9 7.3
Chloroscombrus chrysurus													
South Carolina Outside	- -	- -	- -	- -	- -	6.0 0.6	46.5 2.3	37.4 2.1	4.2 0.1	20.0 0.7	6.8 0.6	- -	11.6 0.6
Georgia Inside	13.2 0.9	7.9 1.6	3.1 0.3	0.2 *	15.4 1.4	17.1 1.3	16.1 0.7	30.3 1.6	18.1 1.3	18.7 1.1	16.9 0.6	26.0 1.0	14.5 1.0
Georgia Outside	120.1 9.7	40.9 4.0	13.0 2.2	0.9 0.1	23.1 2.5	106.3 15.3	119.0 10.7	171.9 13.0	306.6 11.5	58.5 3.0	98.9 4.6	36.2 1.6	93.1 6.7
Georgia Inside and Outside Combined	66.9 4.9	27.6 3.4	6.8 0.8	0.4 *	17.8 1.7	44.1 3.9	66.7 4.1	88.4 5.4	120.7 6.5	36.8 2.1	62.4 2.6	31.9 1.3	47.5 3.3
Florida Outside	331.1 9.8	4.0 0.3	15.3 0.9	49.8 3.8	73.0 27.8	79.7 21.6	58.1 5.7	138.9 6.8	262.8 5.9	624.6 11.1	458.1 8.4	1,107.3 29.5	274.8 10.1

Table 12.--Continued

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cynoscion regalis													
	698.7	31.5	1.5	9.2	37.0	50.0	78.6	40.6	127.0	178.0	186.4	221.5	141.4
South Carolina Outside	18.9	1.6	0.2	1.7	2.5	4.6	4.0	2.2	3.8	6.2	15.0	6.2	6.8
	49.3	9.9	15.2	91.8	38.6	54.0	92.5	117.3	72.6	96.1	52.7	42.5	64.9
Georgia Inside	3.3	2.0	1.5	6.3	3.5	4.1	4.3	6.4	5.2	5.9	2.0	1.6	4.3
	59.5	42.5	6.5	44.3	25.2	7.8	48.3	53.5	70.4	48.7	56.7	120.8	49.8
Georgia Outside	4.8	4.2	1.1	6.5	2.8	1.1	4.4	4.0	2.6	2.5	2.6	5.4	3.6
	54.4	29.3	11.9	77.4	34.5	40.0	70.8	91.1	71.8	74.6	54.9	87.9	58.6
Georgia Inside and Outside Combined	4.0	3.6	1.4	6.3	3.3	3.5	4.3	5.6	3.9	4.2	2.3	3.6	4.0
	137.1	36.1	35.8	38.6		0.7	4.7	16.2	68.9	70.3	67.2	54.7	46.2
Florida Outside	4.1	2.4	2.1	3.0	-	0.2	0.5	0.8	1.5	1.3	1.2	1.5	1.7
Etropus crossotus													
	16.2	10.9	27.1	2.2			1.0	7.8	64.3	14.0	11.6	18.2	15.3
South Carolina Outside	0.4	0.6	2.9	0.4	-	-	0.1	0.4	1.9	0.5	0.9	0.5	0.7
	131.8	64.5	66.7	91.1	9.6	2.5	6.0	16.8	34.4	128.2	278.8	420.4	74.3
Georgia Inside	8.7	13.0	6.5	6.3	0.9	0.2	0.3	0.9	2.4	7.8	10.3	15.7	4.9
	87.2	44.8	16.7	5.1	4.6	1.0	8.6	3.6	25.3	42.7	60.4	67.9	29.9
Georgia Outside	7.0	4.4	2.8	0.8	0.5	0.1	0.8	0.3	0.9	2.2	2.8	3.0	2.2
	109.4	52.8	47.7	65.0	8.1	2.1	7.3	11.4	31.2	89.3	157.6	216.2	55.7
Georgia Inside and Outside Combined	7.9	6.5	5.5	5.3	0.8	0.2	0.4	0.7	1.7	5.0	6.6	8.9	3.8
	24.1	25.2	21.3	12.5	3.7	1.7	8.1	14.9	36.8	25.1	35.2	6.1	19.1
Florida Outside	0.7	1.7	1.2	1.0	1.4	0.5	0.8	0.7	0.8	0.5	0.6	0.2	0.7
Bagre marinus													
					16.7	24.7	15.8	19.6	104.0	168.8	0.2		28.6
South Carolina Outside	-	-	-	-	1.1	2.3	0.8	1.1	3.1	5.9	*	-	1.4
			*	5.8	23.2	46.2	26.7	103.4	109.2	52.2	7.4	0.3	38.2
Georgia Inside	-	-	*	0.4	2.1	3.5	1.2	5.6	7.8	3.2	0.3	*	2.5
				5.7	42.0	2.0	15.0	26.3	142.7	75.1	90.9		32.9
Georgia Outside	-	-	-	0.8	4.6	0.3	1.4	2.0	5.4	3.8	4.2	-	2.4
			*	5.8	29.0	32.8	21.0	71.7	121.1	62.6	53.8	0.1	36.0
Georgia Inside and Outside Combined	-	-	*	0.5	2.8	2.9	1.3	4.4	6.5	3.5	2.2	*	2.5
	146.1	4.6	19.0	5.1	0.3	1.7	1.4	2.5	692.8	138.9	186.1	80.1	121.3
Florida Outside	4.3	0.3	1.1	0.4	0.1	0.5	0.1	0.1	15.4	2.5	3.4	2.1	4.5
Cynoscion nothus													
	27.6	5.6	3.1	5.5	32.0	6.0	43.4	44.4	22.0	32.4	68.2	12.0	25.5
South Carolina Outside	0.7	0.3	0.3	1.0	2.2	0.6	2.2	2.5	0.7	1.1	5.5	0.3	1.2
	0.2			0.3	5.6	1.7	0.6	0.6		0.5	1.4		1.0
Georgia Inside	*	-	-	*	0.5	*	*	*	-	*	0.1	-	0.1
	0.7	*	*	8.1	3.6	7.4	14.0	79.7	134.2	1.0	13.5	11.9	25.2
Georgia Outside	0.1	*	*	1.2	0.4	1.1	1.3	6.0	5.0	0.1	0.6	0.5	1.8
	0.4	*	*	2.6	5.0	3.4	7.2	33.2	47.7	0.7	8.1	6.9	11.2
Georgia Inside and Outside Combined	*	*	*	0.2	0.5	0.3	0.4	2.0	2.6	*	0.3	0.3	0.8
	296.6	93.3	161.5	500.6	23.0	80.0	52.9	197.9	325.6	253.1	492.3	611.8	262.2
Florida Outside	8.8	6.3	9.3	38.4	8.8	21.7	5.2	9.7	7.3	4.5	9.0	16.3	9.6
Galeichthys felis													
				1.4	1.7		66.0	15.6	49.0	15.6			15.6
South Carolina Outside	-	-	-	0.3	0.1	-	3.3	0.9	1.5	0.5	-	-	0.7
	0.8	*	0.4	52.0	87.5	114.4	90.5	152.7	40.2	17.2	6.9		56.9
Georgia Inside	0.1	*	*	3.6	8.0	8.6	4.2	8.3	2.9	1.1	0.3	-	3.8
	2.0		0.2	16.2	7.4	6.4	14.0	42.0	29.0	22.0	22.5	3.5	14.2
Georgia Outside	0.2	-	*	2.4	0.8	0.9	1.3	3.2	1.1	1.1	1.1	0.2	1.0
	1.4	*	0.3	41.1	62.9	81.7	52.9	107.3	36.1	19.4	15.6	2.1	39.0
Georgia Inside and Outside Combined	0.1	*	*	3.4	6.1	7.2	3.2	6.6	2.0	1.1	0.6	0.1	2.7
	4.9		29.0	13.7	0.3	0.3	6.0	33.6	24.0	98.9	41.6	3.3	32.1
Florida Outside	0.2	-	1.7	1.1	0.1	0.1	0.6	1.7	2.8	1.8	0.8	0.1	1.2

Table 12.--Continued

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Anchoa sp.													
South Carolina Outside	23.1 0.6	72.0 3.7	155.5 16.6	13.8 2.5	235.0 16.1	121.0 11.2	8.3 0.4	12.2 0.7	1.3 *	47.2 1.6	30.8 2.5	56.0 1.6	53.1 2.5
Georgia Inside	48.2 3.2	12.9 2.6	34.9 3.4	72.5 5.0	37.6 3.4	31.3 2.4	9.5 0.4	6.5 0.4	16.3 1.2	96.5 5.9	176.6 6.5	72.9 2.7	43.4 2.9
Georgia Outside	33.2 2.7	29.5 2.9	40.3 6.8	29.2 4.3	13.5 1.5	22.4 3.2	5.1 0.5	5.1 0.4	23.7 0.9	39.0 2.0	67.7 3.2	36.4 1.6	27.4 2.0
Georgia Inside and Outside Combined	40.6 3.0	22.8 2.8	36.9 4.3	59.4 4.9	30.2 2.9	28.6 2.5	7.3 0.4	5.9 0.4	18.9 1.0	70.4 3.9	116.2 4.9	51.8 2.1	36.7 2.5
Florida Outside	8.0 0.2	15.8 1.1	14.7 0.8	18.3 1.4	2.3 0.9	28.3 7.7	0.6 0.1	3.8 0.2	1.2 *	0.6 *	-	5.6 0.2	6.7 0.3
Brevoortia sp.													
South Carolina Outside	345.1 9.3	275.1 14.3	75.8 8.1	9.2 1.7	114.7 7.9	101.7 9.4	5.8 0.3	2.4 0.1	0.3 *	1.6 0.1	1.2 0.1	3.3 0.1	72.9 3.5
Georgia Inside	49.9 3.3	66.1 13.3	31.4 3.0	10.3 0.7	9.1 0.8	11.1 0.8	7.2 0.3	2.0 0.1	0.3 *	1.3 0.1	2.6 0.1	4.3 0.2	13.9 0.9
Georgia Outside	107.9 8.7	224.6 22.0	52.4 8.9	2.1 0.3	28.1 3.1	15.9 2.3	3.7 0.3	1.1 0.1	1.1 *	0.3 *	1.1 0.1	13.7 0.6	43.6 3.1
Georgia Inside and Outside Combined	79.1 5.7	160.6 19.9	39.3 4.6	7.8 0.6	15.0 1.4	12.6 1.1	5.5 0.3	1.7 0.1	0.6 *	0.9 0.1	1.8 0.1	9.7 0.4	26.4 1.8
Florida Outside	0.9 *	69.2 4.7	73.3 4.2	6.5 0.5	0.7 0.3	-	0.4 *	1.8 0.1	-	2.9 0.1	0.5 *	1.4 *	12.8 0.5
Trichiurus lepturus													
South Carolina Outside	10.5 0.3	28.4 1.5	1.5 0.2	4.2 0.8	13.0 0.9	15.7 1.5	19.8 1.0	25.2 1.4	4.0 0.1	14.4 0.5	2.0 0.2	1.5 *	11.5 0.6
Georgia Inside	35.4 2.3	4.4 0.9	21.9 2.1	27.2 1.9	59.5 5.5	49.5 3.7	36.5 1.7	8.5 0.5	1.7 0.1	9.5 0.6	7.9 0.3	6.2 0.2	24.1 1.6
Georgia Outside	13.5 1.1	16.2 1.6	25.1 4.2	19.2 2.8	35.5 3.9	26.8 3.9	56.3 5.1	39.2 3.0	16.0 0.6	1.6 0.1	23.6 1.1	59.4 2.6	27.8 2.0
Georgia Inside and Outside Combined	24.4 1.8	11.4 1.4	23.1 2.7	24.8 2.0	52.2 5.0	42.6 3.8	46.2 2.8	21.1 1.3	6.8 0.4	5.9 0.3	16.6 0.7	37.0 1.5	25.7 1.8
Florida Outside	64.7 1.9	38.4 2.6	12.3 0.7	13.8 1.1	-	3.3 0.9	15.2 1.5	20.2 1.0	35.8 0.8	24.6 0.4	31.5 0.6	70.8 1.9	30.6 1.1
Trinectes maculatus													
South Carolina Outside	15.1 0.4	1.6 0.1	4.5 0.5	14.6 2.6	31.7 2.2	5.3 0.5	25.5 1.3	11.4 0.6	55.0 1.7	39.2 1.4	9.8 0.8	13.5 0.4	19.4 0.9
Georgia Inside	0.6 *	1.8 0.4	0.9 0.1	8.8 0.6	15.3 1.4	29.6 2.2	40.0 1.9	80.0 4.3	41.8 3.0	34.9 2.1	29.4 1.1	14.5 0.5	26.7 1.8
Georgia Outside	9.5 0.8	3.4 0.3	1.5 0.3	7.6 1.1	2.9 0.3	2.3 0.3	26.7 2.4	10.4 0.8	19.6 0.7	37.8 1.9	28.1 1.3	24.8 1.1	14.6 1.1
Georgia Inside and Outside Combined	5.0 0.4	2.7 0.3	1.1 0.1	8.4 0.7	11.5 1.1	21.3 1.9	33.5 2.0	51.4 3.2	33.9 1.8	36.2 2.0	28.7 1.2	20.5 0.8	21.6 1.5
Florida Outside	2.0 0.1	4.4 0.3	0.7 *	32.0 2.5	-	1.3 0.4	16.5 1.6	26.9 1.3	74.8 1.7	108.0 1.9	56.0 1.0	14.7 0.4	30.2 1.1
Urophycis sp.													
South Carolina Outside	3.5 0.1	71.6 3.7	305.3 32.6	208.5 37.5	1.0 0.1	0.7 0.1	-	-	-	-	-	-	54.3 2.6
Georgia Inside	2.5 0.2	92.1 18.5	167.2 16.2	27.1 1.9	1.5 0.1	-	-	-	-	-	-	-	25.8 1.7
Georgia Outside	5.7 0.5	48.4 4.8	73.8 12.5	20.7 3.2	1.3 0.1	-	-	-	-	-	-	0.1 *	14.1 1.0
Georgia Inside and Outside Combined	4.1 0.3	66.0 8.2	131.8 15.2	25.2 2.1	1.5 0.1	-	-	-	-	-	-	* *	20.9 1.4
Florida Outside	0.1 *	25.8 1.7	39.0 2.2	20.9 1.6	-	-	-	-	-	-	-	-	6.5 0.2

Table 12.--Continued

Vomer setapinnis	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
South Carolina Outside	1.1 *	-	-	-	-	1.0 0.1	0.5 *	6.4 0.4	2.7 0.1	18.4 0.6	4.4 0.4	7.3 0.2	3.4 0.2
Georgia Inside	-	-	* *	-	1.9 0.2	* *	0.3 *	1.5 0.1	3.9 0.3	5.1 0.3	2.1 0.1	0.2 *	1.4 0.1
Georgia Outside	1.1 0.1	0.5 0.1	0.9 0.2	0.9 0.1	2.5 0.3	1.1 0.2	0.2 *	6.7 0.5	11.9 0.4	9.5 0.5	90.1 4.2	90.3 4.0	16.2 1.2
Georgia Inside and Outside Combined	0.6 *	0.3 *	0.4 *	0.3 *	2.1 0.2	0.3 *	0.2 *	3.7 0.2	6.8 0.4	7.1 0.4	50.9 2.1	52.3 2.1	7.6 0.5
Florida Outside	131.8 3.9	10.2 0.7	24.3 1.4	3.2 0.3	1.3 0.5	9.7 2.6	1.1 0.1	11.6 0.6	80.4 1.8	328.6 5.8	271.2 5.0	443.4 11.8	110.8 4.1
Peprilus alepidotus													
South Carolina Outside	1.5 *	3.6 0.2	-	-	3.0 0.2	0.7 0.1	0.5 *	1.4 0.1	1.0 *	-	1.2 0.1	11.6 0.3	2.0 0.1
Georgia Inside	9.3 0.6	4.3 0.9	12.2 1.2	50.3 3.5	92.0 8.4	25.1 1.9	10.7 0.5	6.5 0.4	7.7 0.5	9.9 0.6	8.2 0.3	3.9 0.2	25.1 1.7
Georgia Outside	10.1 0.8	5.7 0.6	7.9 1.3	12.9 1.9	16.5 1.8	14.8 2.1	5.4 0.5	6.8 0.5	12.1 0.5	11.6 0.6	8.3 0.4	34.5 1.5	11.8 0.9
Georgia Inside and Outside Combined	9.7 0.7	5.1 0.6	10.6 1.2	38.9 3.2	68.9 6.6	22.0 1.9	8.1 0.5	6.7 0.4	9.3 0.5	10.7 0.6	8.2 0.3	21.6 0.9	19.5 1.3
Florida Outside	26.9 0.8	52.1 3.5	17.2 1.0	1.1 0.1	- -	0.3 0.1	1.6 0.2	9.8 0.5	5.2 0.1	15.4 0.3	16.0 0.3	18.9 0.5	14.9 0.6

Table 13.--List of scientific and common names of fish

Family	Species	Common name
Carcharhinidae	Carcharhinus spp.	Shark
	Scoliodon terraenovae (Richardson)	Atlantic sharpnose shark
Sphyrnidae	Sphyrna tiburo (Linnaeus)	Bonnethead
	Sphyrna zygaena (Linnaeus)	Smooth hammerhead
Pristidae	Pristis pectinatus Latham	Smalltooth sawfish
Rhinobatidae	Rhinobatos lentiginosus (Garman)	Atlantic guitarfish
Torpedinidae	Torpedo nobiliana Bonaparte	Atlantic torpedo
Rajidae	Raja eglantaria Bosc	Clearnose skate
Dasyatidae	Dasyatis americana Hildebrand and Schroeder	Southern stingray
	Dasyatis centroura (Mitchill)	Roughtail stingray
	Dasyatis sabina (LeSueur)	Atlantic stingray
Gymnuridae	Gymnura micrura (Bloch and Schneider)	Smooth butterfly ray
Myliobatidae	Aetobatus narinari (Euphrasen)	Spotted eagle ray
Rhinopteridae	Rhinoptera bonasus (Mitchill)	Cownose ray
Acipenseridae	Acipenser oxyrhynchus Mitchill	Atlantic sturgeon
Lepisosteidae	Lepisosteus osseus (Linnaeus)	Longnose gar
Clupeidae	Brevoortia spp. (tyrannus and smithi)	Menhaden
	Opisthonema oglinum (LeSueur)	Thread herring
	(All other herrings--misc. genera and species)	Herring
Engraulidae	Anchoa spp. (largely mitchilli and hepsetus)	Anchovy
Synodontidae	Synodus foetens (Linnaeus)	Inshore lizardfish
	Trachinocephalus myops (Forster)	Snakefish
Ariidae	Bagre marinus (Mitchill)	Gafftopsail catfish
	Galeichthys felis (Linnaeus)	Sea catfish
Ophichthidae	Ophichthus spp.	Snake eel
Gadidae	Urophycis spp.	Hake
Fistulariidae	Fistularia tabacaria Linnaeus	Cornetfish
Syngnathidae	Hippocampus spp.	Seahorse
	Syngnathus spp.	Pipefish
Serranidae	Centropristis striatus (Linnaeus)	Black sea bass
	Centropristis philadelphicus (Linnaeus)	Rock sea bass
	Diplectrum formosum (Linnaeus)	Sand perch
Lobotidae	Lobotes surinamensis (Bloch)	Tripletail
Pomatomidae	Pomatomus saltatrix (Linnaeus)	Bluefish
Rachycentridae	Rachycentron canadum (Linnaeus)	Cobia
Carangidae	Caranx crysos (Mitchill)	Blue runner
	Caranx spp.	Jackfish
	Chloroscombrus chrysurus (Linnaeus)	Bumper
	Decapterus punctatus (Agassiz)	Round scad
	Selene vomer (Linnaeus)	Lookdown
	Trachinotus spp.	Pompano
	Trachurus lathami Nichols	Rough scad
	Vomer setapinnis (Mitchill)	Atlantic moonfish
Gerridae	Eucinostomus spp.	Mojarra
Pomadasyidae	Haemulon aurolineatum (Cuvier)	Tomtate
	Orthopristis chrysopterus (Linnaeus)	Pigfish

Table 13.--Continued

Family	Species	Common name
Sciaenidae	Bairdiella chrysura (Lacépède)	Yellowtail or silver perch
	Cynoscion nebulosus (Cuvier)	Spotted seatrout
	Cynoscion nothus (Holbrook)	White seatrout
	Cynoscion regalis (Bloch and Schneider)	Gray seatrout
	Equetus acuminatus (Bloch and Schneider)	Cubbyu
	Equetus lanceolatus (Linnaeus)	Jackknife-fish
	Larimus fasciatus Holbrook	Banded drum
	Leiostomus xanthurus Lacépède	Spot
	Menticirrhus spp. (largely americanus)	King whiting
	Micropogon undulatus (Linnaeus)	Atlantic croaker
	Pogonias cromis (Linnaeus)	Black drum
	Stellifer lanceolatus (Holbrook)	Star drum
Mullidae	Mullus auratus Jordan and Gilbert	Red goatfish
Sparidae	Lagodon rhomboides (Linnaeus)	Pinfish
	Stenotomus spp.	Scup or porgy
Ephippidae	Chaetodipterus faber (Broussonet)	Atlantic spadefish
Labridae	Xyrichthys spp.	Razorfish
Trichiuridae	Trichiurus lepturus Linnaeus	Atlantic cutlassfish
Scombridae	Scomberomorus maculatus (Mitchill)	Spanish mackerel
Gobiidae	Gobionellus oceanicus (Pallas)	Highfin goby
Scorpaenidae	Scorpaena spp.	Scorpionfish
Triglidae	Prionotus spp.	Searobin
Uranoscopidae	Astroscopus y-graecum (Cuvier)	Southern stargazer
Blenniidae	Hypsoblennius spp.	Blenny
Ophidiidae	Rissola marginata (DeKay)	Striped cusk-eel
Stromateidae	Peprilus alepidotus (Linnaeus)	Southern harvestfish
	Poronotus triacanthus (Peck)	Butterfish
Sphyraenidae	Sphyraena spp. (largely guachancho)	Guaguanche
Mugilidae	Mugil cephalus Linnaeus	Striped mullet
Polynemidae	Polydactylus octonemus (Girard)	Atlantic threadfin
Bothidae	Ancylopsetta quadrocellata Gill	Ocellated flounder
	Citharichthys spp. (largely spilopterus)	Whiff
	Etropus crossotus Jordan and Gilbert	Fringed flounder
	Paralichthys dentatus (Linnaeus)	Summer flounder
	Paralichthys lethostigma Jordan and Gilbert	Southern flounder
	Scophthalmus aquosus (Mitchill)	Windowpane
	Syacium spp.	Flounder
	Bothus ocellatus (Agassiz)	Eyed flounder
Soleidae	Trinectes maculatus (Bloch and Schneider)	Hogchoker
Cynoglossidae	Symphurus spp. (largely plagiusa)	Tonguefish
Echeneidae	Echeneis naucrates Linnaeus	Sharksucker
Balistidae	Balistes spp.	Triggerfish
Monacanthidae	Alutera schoepfii (Walbaum)	Orange filefish
	Stephanolepis spp.	Filefish
Ostraciidae	Acanthostracion spp. (largely quadricornis)	Cowfish
Tetraodontidae	Lagocephalus laevigatus (Linnaeus)	Smooth puffer
	Sphaeroides spp.	Puffer
Diodontidae	Chilomycterus schoepfi (Walbaum)	Striped burrfish
Batrachoididae	Opsanus tau (Linnaeus)	Toadfish
	Porichthys porosissimus (Valenciennes)	Atlantic midshipman
Ogcocephalidae	Ogcocephalus spp. (largely vespertilio)	Batfish

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